The Bowman Lecture.

OPHTHALMOLOGY AND DISEASES OF THE NERVOUS SYSTEM.

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MR. PRESIDENT AND GENTLEMEN,—Besides acknowledging the honour of being asked to deliver an address before this Society, I wish to say that I consider it an additional honour that the address is the "Bowman Lecture." Praise from me to Bowman would be impertinent, but here is my opportunity not only for thanking Sir William Bowman for the benefit which I, like the rest of my profession, have derived from the basic work he has done, but of also tendering him my warmest personal thanks for much encouragement given me in the work I was, many years ago, trying to do. At the same time I gratefully acknowledge that to his successor in the presidential chair (Mr. Hutchinson) I feel highly indebted for my earliest instruction in ophthalmology, as well as for great help of very many kinds for many years.

It was long ago said that division of labour, or, more generally, differentiation, is a universal law. Things become increasingly numerous and more different, or, in other words, more complex. Differentiation is well seen in the development of animal organisms, and is seen, too, in the social organism. It would be very remarkable if there were an exception in the case of one part of the social organism—the body medical—if in so great a field of work as the medical there did not arise more and more different workers in different parts of that field. There is no exception. The body medical is now very complex; there are alienist physicians, neurologists, obstetric physicians, ophthalmic surgeons, aural surgeons, dentists, physiologists, chemists, &c. The speciality of each comes out of, is a differentiated part of, a wide general knowledge.

Specialists have to justify themselves—to justify their differentiation. Differentiation is not the whole of the modern doctrine of evolution. The factors in progressing evolution, according to Spencer, are increasing (1) Differentiation, increasing (2) Definiteness, increasing (3) Integration, and increasing (4) Co-operation.[1]

Obviously, increasing differentiation without increasing definiteness would be only confusion. That the ophthalmic surgeon has justified himself in the second factor of evolution needs no showing. I will instance, however, his highly definite work on paralyses of ocular muscles and on abnormalities of refraction. In neurology I may instance the work of Charcot. And here I must say, as the examples are intended to imply, that by definiteness I mean definiteness which connotes exactness.

Now for the third factor. Each different, definite worker is working for the whole body medical; his work leads to the greater integration of medical knowledge of other workers. Each different worker helps all the others. Many different workers in the medical field are seriously indebted to the ophthalmic surgeon in this way. To give but one example, and making again an arbitrary limit. Argyll Robertson has given to neurologists, in the pupil symptom which is called by his name, not merely a new symptom, but a means of investigation of several important diseases. This debt neurologists, Westphal and Erb, working in a different field, have paid back in showing the diagnostic value of loss of the knee-jerk.

There is yet another factor in evolution,—increasing co-operation. Each different worker, knowing one subject best and having great integration of different, definite medical knowledge, of necessity cannot have the precise knowledge of other subjects which other different workers have. Division of labour necessitates the co-operation of labourers. The whole of one disease is better understood by bringing to bear on its direct investigation and treatment different workers in different fields. To give but one example of the need of integration of different, definite, medical knowledge, and yet of the need, too, of co-operation: the neurologist ought at least to be able to suspect hypermetropia as a cause of head troubles, but only the skilled ophthalmic surgeon can estimate it precisely and correct it accurately.

I think we often err by underrating the complexity of some nervous diseases. I take epileptic paroxysms and their after-conditions as being, together, an illustration of the morbid nervous affection of greatest complexity of symptoms. When its symptomatology is fully displayed, it shows, I submit, the imperative necessity of (1) different, (2) definite, (3) wide, and (4) co-operative work. I speak of the "genuine epilepsy" of nosologists, not of epileptiform seizures. Epilepsy is a disease of the "organ of mind"—that is to say, of the highest and most complex &c. centres. The symptomatology of the paroxysm is probably a universal symptomatology, is demonstrably nearly so. It may be said that insanity is more complex than epilepsy; not so, since epileptic paroxysms are not unfrequently followed by temporary insanity. The study of epilepsy, therefore, involves the study of some cases of insanity. These insanities are what I have called after-conditions of the epileptic paroxysm. We ought, of course, to speak of epilepsies as we should do of insanities; for certainly if two epileptics have different "warnings" of their fits, the "discharging lesion" is in a different part of the highest centres in the two cases. There are many epilepsies and many insanities, but now I give *en bloc* the symptoms of many severe epileptic fits, of many slight fits, and the symptoms of epileptic fits (or I should say epileptiform seizures), artificially produced in dogs; all are, at any rate, symptoms produced by cortical discharges; among them are very important eye symptoms.

At the climax of a severe fit we see the algebraical sums of the co-operations and antagonisms of strongly developed movements of all the muscles of animal life accessible to observation—universal convulsion. As to wide involvement of sensory elements in the epileptic discharge, we can say that this is implied by "warnings" of crude and excessive smells, colours, sounds, tastes, by tinglings &c. of the hands, and by many crude and excessive systemic sensations; of what happens in the sensory sphere after loss of consciousness we can say nothing. Besides colour development, there is another eye symptom—a vertigo, in which external objects seem to move, implying discharge, direct or indirect, of motor cerebral elements representing ocular movements. We find dilatation of the pupil, perhaps, sometimes contraction, great pallor of the face, increased flow of saliva, perspiration, alterations of pulse and respiration, passage of urine and fæces, and erection of the penis.

Vulpian curarised a dog, thus putting the muscles of animal life out of the reach of an artificially induced discharge of the dog's left sigmoid gyrus (artificial respiration). Speaking almost only of effects of cortical discharges which I have not yet mentioned, there were slowing and irregularity of the heart, raised arterial pressure, increased flow of bile, a little paling of the kidneys, and diminution of their secretion, contraction of the bladder, and contraction of the spleen.

So we go a long way towards showing that the epileptic paroxysm has a universal symptomatology, having shown that sensations are referred to many different parts of the body, and that effects by efferent (motor and inhibitory) nerves are produced, in different ways, in very numerous parts, "from the eyes to the feet"—strictly, I suppose, "from nose to feet." We can add to the list of parts represented by the cerebral cortex.

"Bochfontaine and Lepine, on stimulating several points, especially in the neighbourhood of the sulcus cruciatus in the dog, observed increased secretion of saliva, slowing of movements of the stomach, peristalsis of the intestine, contraction of the spleen, of the uterus, of the bladder, and increased respirations."[2] Bufalini has observed the secretion of gastric juice.

I do not think I need apologise for speaking in this lecture of the non-ophthalmological symptoms of epileptic paroxysms, especially of those of the organic parts. The

[1] I am using terms more familiar to medical men than those Spencer uses; for this change, of course, Spencer is not answerable, nor must he be held responsible for my statement and applications of his formula of evolution. I should consider it a great calamity were any crudities of mine imputed to a man to whom I feel profoundly indebted.

[2] Landois' "Physiology," ii., p. 942, Stirling's translation.

neurologist and the alienist physician must take into account all the symptoms. They are an important part of the evidence towards showing that the "organ of mind" (highest centres) represents or coördinates all parts of the body; in strictly equivalent words, that the highest centres are centres of Universal Coördination. It is thus they are the "organ" of will, memory, reason, and emotion—the four elements of mind, or, equivalently, of consciousness. Unless retinal impressions corresponding to colour of objects and ocular movements corresponding to shape of objects are represented in the highest centres, how are we to account for the physical bases of visual perception and ideation? If the organic parts are not represented in the highest centres, an emotional manifestation, say of fear, is unaccountable; and so, too, are the physical symptoms of some cases of melancholia, the insanity of fear (anxiety, depression, &c., being only "fear spread out thin"). Whilst a man is thinking, or even dreaming, of a brick, he is having a purely physical state; the correlative physical state is discharge of some nervous arrangements of his highest centres *representing parts of his body*, certain retinal impressions and particular ocular movements. Again, when a man is afraid he is having a purely psychical state; the correlative physical state is discharge of some nervous arrangements of his highest centres *representing parts of his body*, notably the organic parts. There are clinical reasons why the ophthalmic surgeon should be interested in symptoms in organic parts. Often enough in other diseases of the cerebrum does he see eye symptoms with effects produced in organic parts. To say nothing of vomiting, so common with optic neuritis from cerebral tumour, there are acute stages in such cases, in which there are alterations of pulse and respiration, retracted belly and constipation. Consider also the migrainous paroxysm, which is no doubt owing to a cortical discharge, so often beginning by elaborate visual projections, and so often ending by vomiting. Eye symptoms from disease of the cerebrum cannot in many cases be studied isolatedly from organic symptoms. We have not yet done with the complexity of the epileptic paroxysm.

We must note in slight fits movements of chewing or tasting, swallowing, vomiting, and writhing movements of the arms during arrest of respiration. I do not believe that these movements result directly from the epileptic discharge, holding that *such* a discharge, so far as it spreads, puts an end to all movements properly so called—"runs them up" into convulsion. I suggest that an important eye symptom at or near to the onset of some epileptic fits, the apparent alteration in size or distance of external objects, is, on the physical side, a phenomenon of the same order as the chewing movements, that both are the indirect (reflex) results of epileptic discharges of sensory elements. Ferrier produced, by faradising a monkey's "taste centre," movements like the chewing and tasting movements which some epileptics or their friends describe. It is exceedingly important to distinguish movements proper from convulsion, which is a contention of many movements. I suppose everyone would believe that spitting, rubbing one hand with the other, clutching at the throat (in rapid suffocation?), in slight seizures, are movements too elaborate to result directly from *such* a discharge as that which produces convulsion.

There is yet more complexity; when in severe fits respiration is arrested, there is carbonic acid poisoning. Asphyxia renders a dog's cerebral cortex inexcitable (Hitzig, Franck, and Pitres), but some lower centres, or parts they supply, or both, are stimulated; thus there will be a multiplication of effects. Asphyxia produces dilatation of the pupil, besides other effects—salivation, sweating, &c. But we must bear in mind that the centres directly stimulated by carbonic acid, or over-acting from lack of oxygen, in simple asphyxia, will be, more or fewer of them, to some degree, in an epileptic paroxysm, already engaged by the epileptic discharge, and that when the fit is over there will be a degree of exhaustion of them corresponding to the degree of prior discharge, and so far an unsusceptibility to be acted on. The pupils are very small after severe epileptic fits.

Now for the mental symptoms of, or rather during, the discharge beginning in some part of the "organ of mind." During the epileptic discharge there is defect or cessation of consciousness. Some think that also during it, at the onset of some fits, there arises the exactly opposite mental states of "over-consciousness"; "dreamy state," "seeing faces," and "hearing voices." I believe these super-positive mental states, and adding to the list fear—different miniature insanities—at the onset of different epileptic attacks, to arise during slightly raised discharges of healthy nervous arrangements untouched by the epileptic discharge.

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Speaking now of the after-conditions of epileptic paroxysms very generally, we have insanity, according to the severity of the fits, in two degrees at least—in three, I think. There is so-called "loss" of consciousness with actions (post-epileptic "unconsciousness" with mania, for example), and after very severe paroxysms, acute dementia (coma). Here I remark that it is vain to attempt the realistic study of epilepsy and its after-conditions, or that of any other insanity, without psychological knowledge. Confounding psychology with physiology of the highest centres leads to crude metaphysical explanations, such as that in post-epileptic coma a man does not move because he is unconscious; although in a slighter post-epileptic condition (post-epileptic mania) there is movement enough when, according to the opinions of most, consciousness is lost. Taking post-epileptic coma after a very severe fit, there is exhaustion of more or less of the highest centres implied by the negative affection of consciousness, and, in some slighter degree, of more or fewer of the lower (more organised) centres. Westphal and Gowers have noted transitory absence of the knee-jerks after epileptic paroxysms, thus showing there to be sometimes exhaustion of lumbar nuclei, some lowest centres. Deep post-epileptic coma is psychically dementia, but is on the physical side nothing else than some universal, almost total, paralysis—paralysis not only of animal, but of organic parts also—proportionate to the degree of the prior epileptic discharge upon them.[2] This contention of mine is, however, denied; let us say, what cannot be denied, that the patient is nearly dead. I dare say my calling the psychical side of this condition, insanity (dementia or amentia) will be objected to. Let us say that the patient is, or is nearly, mentally dead; this cannot be denied. Moreover, the patient is suffering from carbonic acid poisoning, from slow respiration, from imperfect circulation; thus there will be a multiplication of effects. Possibly the asphyxia helps somewhat in re-evolution by strongly stimulating the respiratory and other partially exhausted (lowest) centres.

There is one after-effect, a valuable eye symptom, which is certainly paralytic—transitory lateral deviation of the eyes, observed by Beevor instantly after severe attacks. Again, the exaggerated knee-jerks and foot-clonus after some fits (Beevor) imply paralysis, signify exhaustion of fibres in the lateral columns, and possibly also of inhibitory centres in the cord (Gowers). Here we have after-effects at the two extremes—eyes (paralytic) and feet (implying some paralysis); it would be remarkable if the rest of the symptoms were not paralytic.

I submit that it would not be possible for a neurologist to scientifically study this exceedingly complex disease without availing himself of the work done by different specialists. We require many different kinds of *definite*, or technical, knowledge; all the sagacity in the world will not avail either for practical ends or for the scientific investigation of complex problems without technical knowledge. No one man can have from his own working enough different definite knowledge to thoroughly investigate the universal symptomatology of epilepsy. It is vain to begin its careful analysis without aid from psychology. Could the neurologist analyse the physical condition without help from the physiologist? How, without that help, is he to put in any reasonable order symptoms related to the organic parts, slowing of the heart, raised arterial pressure, and the rest? Recent researches by Gaskell will, I think, help us greatly in our analysis of the organic symptoms. I submit the hypothesis that in some cases the first effects of the epileptic discharge on the organic parts are by intermediation of Gaskell's lucenteric (inhibitory) fibres. Does not the neurologist need the help of the alienist physician? witness the definite work on epileptic insanity by Falret. To the ophthalmic surgeon the neurologist is very directly indebted. Here I will pick the eye symptoms out of the heap.

Sometimes, but yet rarely, we have optic neuritis or simple optic atrophy as I have illustrated. To speak only of the paroxysm. In some cases there are colour warnings, occasionally followed by the vastly more elaborate mental state, "seeing faces." There are pupillary affections. In one case of uræmic convulsions I saw the fundus easily during

[2] Of course we cannot say that such super-positive phenomena as foot-clonus, passage of fæces, &c., after epileptic fits, are paralytic, but they signify exhaustion of "controlling" nervous elements, are indirect evidences of paralysis.

the fits, when the pupils were widely dilated, but could get no glimpse of it in the intervals. Vulpian found that the pupils in his curarised dog enlarged during the artificially induced paroxysm, and that after the fit they were smaller than before the fit. We have vertigo at the onset of some paroxysms. Vertigo is consciousness ceasing; that variety of it in which objects seem to move to one side is an eye symptom; it implies discharge, primary or secondary, of centres representing particularly the most special of ocular movements. If we have not clear ideas on vertigo in epilepsy we shall work sad havoc in the investigation of some important varieties of epilepsy. Here the neurologist should avail himself of the definite knowledge the ophthalmic surgeon can give him from cases of paralyses of ocular muscles, in which vertigo is seen in its simplest form, before he studies it in the vastly complex circumstances of the epileptic paroxysm. After that he should take heed of what the aural surgeon can tell him of ear vertigo. I have seen, so to speak, vertigo during an attack of ear vertigo; speaking more correctly, I saw the patient's eyes jerk to one side whilst he saw objects jerking to one side.[4] In our Transactions (vol. iii.) I have recorded a case (essentially like one previously published by Schwabach) in which pressure on a diseased right ear produced vertigo and movements of the eyeballs to one side. Such cases are very valuable in the interpretation of vertigo. The variety of vertigo mentioned occurs no doubt in an epileptic fit along with turning of the eyes to one side. Beevor has noted that after some epileptic fits the eyes deviate from the side to which they were strongly turned in the prior paroxysm. This is a matter of great importance. That movements of the eyes are represented in the highest motor centres (frontal lobes—motor divisions of highest centres) one might infer *a priori*. Ocular movements are the most representative of all movements. Most mentation is carried on in visual perceptions and ideas; and as there is an element of, or symbolising, shape in every visual perception and idea, there is of necessity a representation of ocular movements in the physical bases of these perceptions and ideas that is in the highest centres. Ferrier and Gerald Yeo find, by experiments on monkeys, that movements of the eyes and head are represented in the frontal lobes. There is another important eye symptom in epilepsy: apparent alteration in the size and distance of objects. It occurs, I think, most often in those epileptic attacks in which there is the "dreamy" state. It is physically a "motor affair"; that size and shape are not simply "retinal affairs" is easily proven. Here we avail ourselves of the definite knowledge of the ophthalmic surgeon (the micropia after instillation of atropine; in paralysis of an internal rectus; the opposite condition after eserine). But we must not apply the knowledge derived from such simple cases to alterations in size of external objects at the onset of epileptic fits without great caution, the situation being an exceedingly complicated one. I have already stated an hypothesis regarding the mode of production of these phenomena. Dr. Gowers has considered them with his characteristic ability in his valuable work "On Epilepsy" (p. 64)—a work rich in ophthalmological knowledge.

Although I have spoken of epilepsy, there are really very many epilepsies, and thus, illustrating by the eye symptoms (vertigo, colour, alteration in size or distance of objects), we should try to find the particular sequence of symptoms of other kinds of which each of the eye symptoms is the prelude. Epilepsy is not a complex thing when it is empirically regarded as a clinical entity, which for some purposes it should be. It is comparatively easy to note the "causes," "warnings," &c., "of epilepsy"; much good work has been done in that way. But, besides investigating in this way, we have to "turn ourselves round" and try to ascertain what different symptoms result from differently seated "discharging lesions" of the highest centres. We have the large compound question to answer, What is the constitution of the "organ of mind" (highest centres) by which it results (1) that discharge, beginning in different parts of it produces different epilepsies, and produces, if severe enough, (nearly) universal effects (no doubt in different degrees and sequences); whilst (2) other kinds of disease of different parts of the "organ of mind" produce different insanities? 3. In one case we may have first in the paroxysm cessation of consciousness and universal convulsion, with equivalent effects in the organic field, and then after the paroxysm insanity—acute temporary dementia (coma) or "loss" of consciousness with mania. After epileptic fits of different degrees of severity we have different degrees of insanity, from "confusion of thought" to coma. Indeed, some physicians go so far as to say that an attack of mania sometimes occurs instead of an epileptic convulsion; as I have implicitly said when speaking of movements properly so-called and of elaborate mental states, I do not hold this hypothesis. 4. We have to find a means of studying epilepsies and insanities (diseases of the highest centres) comparatively with diseases of lower centres.

It is impossible even to begin to work methodically towards answering the compound question put if we confuse psychology with the anatomy and physiology of the nervous system; manifestly, referring to 4, we cannot reasonably compare and contrast loss of consciousness from disease of the highest centres with a monoplegia from disease of some middle centre, nor with any other physical symptom.

We should follow the method of science, and investigate by the use of hypotheses. This may seem a strange remark to those who erroneously suppose an hypothesis to be a conclusion in which we may rest. It is only used for the methodising of work by observation and experiment. I submit that we should adopt the hypothesis of evolution, according to which the whole nervous system is a sensori-motor system representing all parts of the body. I suggest that all parts of the body are represented in each of three levels of evolution (representative, re-representative, and re-re-representative). Strictly we should speak of four levels; as, when tracing the "ascent" (*vide infra*) from eye muscles to most complex ocular movements, we should begin at the periphery. Representation increases in (1) differentiation (complexity), (2) definiteness (speciality), (3) integration (intricacy), and (4) in number of interconnexions (co-operation), from lowest centres to highest centres ("organ of mind"). The "organ of mind" is nothing else than a series of centres representing, or, what is the same thing, co-ordinating, all parts of the body "from eyes to feet" in greatest complexity, &c. Let me compare and contrast the lowest level of evolution with the highest, ignoring the middle level. Each lowest centre represents, most nearly directly,[5] some (3) limited particular region of the body (least integration), each some region in (1) fewest and least different, and (2) least definite, combinations; there are (4) fewest interconnexions between these centres. The supposition is that each of the highest centres represents triply indirectly (through middle and lowest) (3) all or very wide regions of the body; that each represents in (1) most numerous, most different, and (2) most definite combinations; that there are (4) most numerous interconnexions between these centres. (Each highest centre represents all parts or wide regions of the body; no two represents all parts, or the same parts, in the same way.) The evolutionist, it must be added, does not attempt the marvellous feat of "getting the mind out of the body"; he only tries "to get" the physical bases of mind (highest centres) out of the rest of the body. Mental states are only concomitant with nervous states. Taking mental symptoms to be only signs of what is not going on, or of what is going on wrong, in the highest parts of a great sensori-motor mechanism, we may, I hope, find an answer to the large compound question put. We cannot expect to find an answer if we are not thoroughly materialistic as to what is purely material—the nervous system.

Taking an opthalmological illustration, and yet artificially simplifying it by considering only the first factor in evolution, we might try to trace an ascending complexity of representation from the nerve-supply to ocular muscles up to representation of ocular muscles in exceedingly complex movements in the physical bases of visual ideas and other mental states. We should use the "experiments" which disease makes (dissolutions) in endeavouring to trace that "ascent" (1) paralyses of ocular muscles from lesions of their nerve trunks (periphery), (2) ophthalmoplegia externa and interna (lowest motor centres), (3) lateral deviations of the eyes in lesions, negative and positive, of the middle motor centres, or of a plexus (internal capsule) just below them (Vulpian and Prevost). In some limited epileptiform seizures we see development of movements of the eyes in very important associations. Possibly the interesting and remarkable

[4] "Brain," April, 1879.

[5] I use numbers to indicate the particular factors of evolution previously stated. It is convenient here to state the factors in different order.

paralyses of particular ocular movements which Priestley Smith has described are monoplegias owing to negative lesions of some middle centres, (4) deviations of the eyes in and after epileptic fits, which are, I presume, developments of and losses of the movements represented in the physical bases of visual ideas and other mental states. These "experiments" are very rough, but some of them can be supplemented by the very definite experiments, properly so-called, of Hitzig and Ferrier. I refer again to the proof which Ferrier and Gerald Yeo have given of the representation of ocular movements, or of the most special of them, in the frontal lobes; these parts of the "organ of mind" I call highest motor centres.

It may be said that such a wide way of studying diseases tends to vagueness. I think we may guard ourselves against this.

In the epileptic paroxysm (dissolution being effected) the universal symptomatology is suddenly presented, and is transitory. But whilst working at this disease of the highest level of evolution, and at insanities, other diseases of it, we may, at the same time, work at different diseases of the lowest level (ignoring the middle in this illustration) in which, taking numerous different cases, the symptomatology is of nearly all, if not of all, parts of the body. I remind you that the hypothesis is that the lowest level represents all parts of the body; that the middle level is that lowest level over again, and, so to speak, "raised to a higher power"; that the highest level is the middle over again, and "raised to a still higher power."

In different progressive muscular atrophies we have symptoms nearly, if not quite, all along the lowest level, from ophthalmoplegia externa downwards (some forms of "bulbar paralysis," the common variety, Duchenne-Aran, &c.), "from the eyes to the feet." (Here is an important ophthalmological matter. It is well known that with distructive lesions of the brachial plexus we have smallness of the pupil on the side of the injury. Ferrier finds that in the monkey, and presumably it is so in man, the dilator fibres of the iris, contained in the cervical sympathetic, are derived from the anterior root of the second dorsal nerve. In the monkey the second dorsal sends a communicating branch to the brachial plexus, and so it does in most cases in man (Cunningham). Now, the second dorsal root (Ferrier) supplies also the intrinsic muscles of the hand. In one case I have observed a small pupil (inability to dilate when shaded) in a case of progressive muscular atrophy at a stage when the hand muscles were almost solely those atrophic. Here again the neurologist has common ground with the ophthalmic surgeon.) So much for atrophy of the animal parts; now for the organic parts. The separation is, of course, not absolute; bulbar paralysis is evidently a morbid affection of parts mixed in function, or rather having both kinds of function. I submit, quite hypothetically, that we have atrophies of cells of centres for organic parts, like the atrophies of cells of anterior horns and their homologues, which produce progressive muscular atrophies; thus I submit that (pernicious) diabetes may be a nuclear atrophy—progressing atrophy of cells of that part of the great vaso-motor centre which especially governs the hepatic artery. I would venture to suggest that Graves' disease is of the same kind of central pathology. (Similarly, *mutatis mutandis*, for myxœdema; atrophic central changes, leading to atrophy of the thyroid body. Dr. Ord says that marked bulbar paralysis has been found in two cases.)

In Graves' disease we have an important eye symptom—that on the patient's looking down the lid does not follow the globe; perhaps by this symptom we may hope some time to fix the seat of the morbid changes in the centres. Warner and Bristowe have recorded a case of Graves' disease in which there was also a form of progressive muscular atrophy, ophthalmoplegia externa. This case so complicated renders my hypothesis a little plausible. Of course I do not mean that all the super-positive phenomena in Graves' disease are the direct consequences of atrophy of cells. The engorgement of the thyroid body may be owing to such atrophy of some parts of the vaso-motor centre. Some other symptoms—e.g., the palpitation—may be indirect consequences of atrophy of cells of inhibitory centres. There is no reason why atrophy should not begin in cells of Clarke's column and its higher and lower representatives, and in spinal and bulbar "regulating centres."

In tabes dorsalis we have, taking numerous cases, symptoms "all along the line," from optic atrophy and pupillary affections downwards—"from eyes to feet.' In these cases we have morbid affection of many organic parts—among others, gastric crises (Charcot, Buzzard, &c.), bladder troubles, and impotence; sometimes loss of smell and hearing; but the most important sensation defect is of resistance, a defect clearly seen in cases where there is the feeling of "padding" of the soles.

Diphtherial paralysis[6] is another disease on the lowest level of evolution, probably (Vulpian, Dejerine, Abercrombie, and Percy Kidd) a myelitis of parts of anterior spinal horns and their higher homologues (possibly the ptoamine generated during the diphtheria acts somewhat like curare and poisons endings of motor nerves). In this disease we have, in severe cases, paralysis from eye (ciliary muscle) downwards "from eyes to feet." We must not forget the occasional implication of the organic parts—death after slowing of the pulse. (Implication of the accelerating centre?)

We may study the nearly universal symptomatology of different kinds of disease on the lowest level of evolution, made up by the symptoms of the cases mentioned and by other diseases on that level. The ophthalmic surgeon sees eye symptoms from lesions at or near to the "top" of the lowest level of evolution, and in cases which, superficially regarded, are uncomplicated; but, having great integration of medical knowledge of other kinds, he does not regard them as eye diseases only, but finds what they mean, what symptomatology they are important elements in. By co-operation of many different workers, each with definite or special knowledge of particular kinds, and each with great integration of more general knowledge, we may hope to thoroughly analyse the three very complex symptomatologies. The symptoms are slowly produced, are presented in detail, are persistent or permanent, and so to speak, are comparatively simple analysing experiments by disease on the lowest level of evolution (simple dissolutions). But now, regarding these symptoms taken *en bloc* as signs of negative lesion of (nearly) all parts on the lowest level of evolution, let me compare and contrast them with symptoms from negative lesions on the highest level.

The condition of a patient after a severe epileptic fit is one of nearly universal, and almost total, paralysis (dissolution effected). He has loss of consciousness, but this has nothing to do with his not moving. The symptomatology is, so to speak, the "evolutionary sum" of all or nearly all the symptoms of all the diseases on the lowest level of evolution. This statement needs obvious qualifications; one is important. Since the epileptic discharge, beginning in the highest centres, produces effects in nearly all (ento- and epi-) peripheral parts, currents from this primary discharge must have traversed and discharged more or less of the middle and lowest centres in order to "get at" the periphery. Hence the paralytic condition after a very severe fit will be a very compound one, all orders of centres being somewhat exhausted, but in different degrees.

Thus the neurologist, by availing himself of the different, definite work which ophthalmic surgeons, aural surgeons, laryngologists, &c., are doing at different points all along the (1) lowest level of evolution, by working himself at different diseases on the (2) middle level (epileptiform seizures, migraine, monoplegias, paralysis agitans [?] &c.), by working with the alienist physician at diseases of (3) the highest centres (epilepsies and insanities, and insanities sequential on epilepsies), may hope to justify his differentiation. The several workers may hope to add (1) different, (2) definite knowledge to, and further (3) the integration of, general medical knowledge, and to lead to a higher and more methodical (4) co-operation. I say once more that this comparative study cannot be methodically undertaken if we confuse psychology with the anatomy and physiology of the nervous system—not to be done if we take the *organ* of mind to be *mind*. The "organ of *mind*" is simply a series of sensori-motor centres, re-re-representing impressions and movements of all, literally all, parts of the body

[6] A valuable paper by Benson, of Dublin, on this morbid affection appears in the Transactions of the Ophthalmological Society, vol. iii.

QUEEN'S COLLEGE, GALWAY.—The following scholarships have been awarded by the Council in the Faculty of Medicine:—Fourth year: Eaton W. Waters. Third year: Henry Smith, Joseph Stewart. Second year: Joseph Eldon, Joseph A. Loftus.

Inaugural Address
ON
MEDICAL TREATMENT.

Delivered before the Midland Medical Society, November 11th, 1885.

BY SAMUEL WILKS, M.D., L.L.D., F.R.S.

(*Concluded from p. 890.*)

I CONSTANTLY hear the opinion expressed that our knowledge of therapeutics lags far behind our knowledge of physiology, pathology, or clinical medicine. I have no sympathy whatever with this notion, for I believe they all go hand in hand; and if I venture my own individual opinion—and with this, perhaps, some of you will not agree—I do not wish for any more drugs, for what good would they be to us? What is the use of putting edged tools into the hands of children who do not know how to employ them? What is the value of a drug, even if we are not uncertain of its action, but have no knowledge of the indications for its use? I think you will, perhaps, be more inclined to agree with me if you look into the past history of medicine, and what is true of the past is true of the present in a lesser degree. Suppose our ancestors, with a less amount of knowledge of disease than ourselves, had been in possession of powerful drugs—is it not clear that harm would have been done by their employment, as we know was the case by a misuse of those which they had, and of other powerful agents. Had they not the means of using stimulants, and applying heat and cold, and similar methods? and do we not know that they injured their patients by their use? Take, for example, the specific diseases attended by fever; we are all now aware that the fever is a dangerous symptom, and that the patient will run favourably through the disease when this is kept in abeyance. Now what thought our forefathers? Why, that the symptoms should be encouraged, and heat was to be promoted. What was wanting to these good people were certainly not powerful agents, but a better clinical knowledge of disease. Hear what Sydenham says. He tells us that, before his time, he found small-pox treated by placing the patients in a hot room with a fire, closed windows, and with blankets heaped upon them. He, with more enlightenment, commenced a totally different system: he opened the windows, and allowed the patient to lie cool; and the good result was so marked that he was forced to the melancholy conclusion that people would do better, if left quite alone, than be treated by the usual method. Here are his words: "It appears, from what has been said, why so few of the common people die of this disease, compared with the rich that are killed by it, which, indeed, can hardly be ascribed to any other cause than that, by reason of their poverty and country way of living, they have not power to hurt themselves by a more accurate and delicate regimen. But this disease has destroyed more of the common people since they knew the use of mithridate, diascordium, and decoction of hartshorn, and the like, than in ages more unlearned, but far wiser; for now there is scarce a house wherein there is not a pragmatical woman who practises that art to man's destruction which she never learnt." Now, this is really an awful consideration, that the use of remedies should ever do harm; but if the reason was clear that it was so in Sydenham's time, it must be true still. I confess, for my own part, that I never pass a week without having inwardly to exclaim, Thank Heaven, we have no more drugs, and that those in use are not so powerful as their administrators would wish. I will explain. I see a lad with pleuritic effusion which has pushed down his liver; the medical man had overlooked the presence of water in the chest, but had discovered the liver below the ribs. He considered this to be enlarged, and gave the boy mercury to reduce it. Now, is it not fortunate that mercury had not the wished-for power in reducing a healthy liver to half its size? Again, I see people with osteitis deformans and other cases where the bones are enlarged, and iodide of potassium is almost universally given, but it never does any good. Again I exclaim, How fortunate is this! Could iodide of potassium absorb bone, what a responsibility would rest on the medical men who prescribe it, and what a condition would all the skeletons of civilised people be in. Another example—the hypertrophied spleen. Nearly all patients with this affection are given quinine and iodide and bromide of potassium in order to reduce it. How thankful I am these attempts are ineffectual; for if these drugs could absorb healthy spleen-structure, what a mass of people would now been spleenless! I have more than once heard a medical man deplore the want of a more powerful styptic in a case of hæmorrhage from the lung in heart disease, and in hæmorrhage from the stomach in cirrhotic enlargement of the liver, when Nature was doing her best to relieve the congested organs. If good liver-tissue, bone-tissue, and spleen-tissue could be removed in the manner hoped for by the medicines given for the purpose, and if gorged lungs and livers could be stopped emptying themselves by styptics, is it not a mercy that we have no more powerful drugs? The only compensation I can see for these direful influences would be the compensating power of reproduction by other medicines in the way of flesh-formers, fat-formers, blood-producers, and the like. For example, a little idiot child is taken to a doctor, who prescribes for it cod-liver oil and phosphate of iron, as being the only likely remedies to improve the brain, seeing that phosphorus and fatty matters enter into its composition. Now, if the prescriber had his wish, he would have liked to have created some more good cerebral tissue, or seen the brain grow. Supposing he could have done so, consider the gigantic brains and corresponding intellects which it would be in the power of the profession to produce. The result of all this experience teaches me that we have enough drugs for our present state of medical knowledge. In spite of the enthusiasm of some as to the value of drugs, I think there must be a large amount of scepticism afloat in the minds of the profession; for if, for example, in a case which is believed to be tubercular meningitis, medicine should be given in a most serious mood, and the child recover, the medical man thinks he must have been mistaken in his diagnosis, and the disease could never have existed. He never fails to give medicine, but never expects it to do any good; he has some kind of hope that it may be useful in some other way. Now this is a very curious attitude of the medical mind. To prescribe for a complaint in the hope that it does not exist, or that it is something else. Then, again, scepticism is shown in the absence of any compunction of conscience when we discover that we have mistaken the nature of the case. Now, if remedies were more precise in their action, they would do harm if wrongly prescribed (as assuredly all good remedies do), and when the discovery was made, our bewailing would be great; but this is not so, or with rare exceptions. I think Helmholtz told us that he was brought up to the medical profession, but when one of his patients died he felt the responsibility so great that he gave up medicine for the study of natural science. Simple-minded man! I think I can show you how an improved treatment has come about, not by the discovery of new drugs, but by a better knowledge of the nature of disease and by clinical observation. Thousands of persons are now cured of epilepsy, paralysis, and various other nerve disorders, by means of iodide of potassium; and why? Because syphilis was found to attack the brain and internal organs when a more extended and closer observation of morbid structures was begun to be made in the post-mortem room. Let me most emphatically dwell upon this fact, that an improved treatment, saving thousands of lives annually, arose, not from the discovery of a new drug, but from work in the deadhouse. Suppose phthisis is proved to be of bacillary origin and is to be treated by antiseptics, where are we to look for the origin of the improved treatment? Not to any new remedies, for they were already at hand, but to the pathological laboratory at Berlin. The cold bath has saved many lives in hyperpyrexia. The remedy had always been before us, but was not put in force until suggested by the thermometer. Look, again, at the enormous improvement in surgery due to the antiseptic treatment, whereby tens of thousands of lives are now annually saved. This was not due to the discovery of new remedies, but by seeing the necessity for using those which we had. I might go on illustrating the fact that a very large part of the improved treatment of late years has not been by the use of new drugs, but by pathological and clinical researches, which have pointed out the use to us of those which we have always before us. It would require a long survey of the practice of medicine to show the proportional advances made in treatment by the

introduction of new drugs and by an improved pathological and clinical knowledge. You must judge for yourselves; but for my own part, if I look merely at the two examples I have mentioned—the cure of visceral syphilis by iodide of potassium and that of antiseptic surgery,—and remember how the improved treatment has saved thousands and thousands of lives, I cannot but think that the preponderance in favour of pathological and clinical knowledge is overwhelming. It seems to me that, so far from therapeutics lagging behind, we seem to be ever ready with drugs when we require them. A well-known gynæcologist told me the other day that every rising member in his department had invented a new pessary, but probably there were only one or two who had the experience to know whether the instrument was wanted or not. The treatment had far outrun pathology and clinical medicine.

I am not saying a word against pharmacology, for I hail with delight the introduction of a drug whose action we know and whose use we have ascertained; and as regards this department of our art, I believe great advance has been made of late years. I have been more than once told by examiners at medical boards that students fail in writing prescriptions. I answer that this is probably true, but that they have learned something better—a knowledge of drugs. I can go back now many years, and call to my remembrance Addison and Babington in the wards of Guy's Hospital, and their dictating prescriptions which were written out in a book by the clerk, but I have no recollection of them ever giving a reason for mixing a dozen drugs together. It is very different now. After an examination of the case, the physician asks what is the best treatment to pursue, and if there be any medicine which may be of service to the patient. If it be thought so, a medicine is ordered in its simplicity. The students have thus an opportunity of watching its effects unalloyed with other drugs, and in this way they acquire a positive knowledge of the effects of iodide of potassium, digitalis, belladonna, or arsenic. They know now that quinine is not only a tonic, but an antiseptic and antipyretic. A very revered physician, who died not long ago, is reported to have said that therapeutics had retrograded the last twenty years. This coincided with the time at which he retired from practice. I believe there is not the slightest truth in such a supposition, but, on the contrary, I hold that it has made a marked advance.

When I said just now that it is the custom to prescribe a drug for every ailment for which the patient seeks our advice, I am well aware that this is often done to act on the patient's mind rather than on the supposition that it has any directly curative effect. I believe this is not only legitimate, but right, for human nature requires something to be done on which to rest. None of us are so strong-minded that, if lying on a bed of suffering, and a friend came in and put something in our mouth, assuring us at the same time that it would do us good, we should not be relieved and feel happier than if we were told we must lie and suffer. I think, however, that when we have prescribed for the patient's mind, we should hesitate before giving him medicine for the sake of his friends. When, for example, a patient is lying unconscious on his bed and beyond all hope, I feel very reluctant to make him swallow physic for the satisfaction of those around him. If it do him no harm, so much the better; but how often is the medical man asked to give a patient a narcotic because he does not sleep at night, and the friends get tired of the weary hours? A man, although he obtain snatches of sleep during the day and night which suffice for his necessities, must have an opiate given him because the wife declares she cannot go through another such night. My belief in remedies goes to this extent, that if the right one for the complaint be given it is tolerated, and that all good remedies, if not rightly administered, do harm. When, therefore, I hear of a universal remedy like bromide of potassium being given with impunity for any time and in any doses, I do not form a very high opinion of its value. I believe also that we have a sufficient number of remedies to afford relief in all complaints, even the organic and incurable; therefore, if in any case no medicine is of any good, and the patient says I cannot take this and I cannot take that, I conclude that he or she has no disease to cure. We thus have a number of patients who are never any better for our treatment, and I am often inclined to reverse the aphorism of Hippocrates, and exclaim, "Life is long, but art is short."

I find it impossible to speak of medical treatment without touching on the subject of specialism. I do so rather reluctantly, because a discussion of it seems apt to arouse angry feelings—a fact in itself, however, which might be made use of in arguing the question of its advantages. From what I have already said, there can be little doubt in what direction my own thoughts tend; for, when I say it is a prime duty of the medical man to discover the causes which give rise to complaints, and that so many of these are to be found in our usual surroundings, it is evident that a very large and comprehensive view must be taken of the conditions in which we live before we can arrive at a conclusion upon this point. When, again, a large number of ailments are due to the wear and tear of life, and to age itself, a consideration must be given to the working of the whole organism, in order to understand the derangements thus brought about. No limited view of one part of the body would suffice. Again, if one organ is so markedly diseased as to warrant the expression of a name denoting its morbid change, a large number of other parts are affected in relation with it. This is one of the most striking facts observed by those who make post-mortem examinations, and I can substantiate it with the result of large experience: that, under whatever name the patient die, a very large number of structures in the body are found altered from their normal state; and, on the contrary, that a number of persons dying under different appellations may be all the subject of the same disorder. One may be dying insensible with coma, another with fits, a third with apoplexy, a fourth with pneumonia, and so on; and yet all these persons are the victims of chronic Bright's disease. During life the affections which are called secondary or accessory to the main disorder may not be so manifest, but assuredly they exist. In these circumstances it seems to me perfectly impossible for anyone to treat one organ alone, without a due consideration of others; and I know as a fact, from observation, that the best physicians are those who can take the body as a whole, and study the relations existing between the parts, and then regulate the functions accordingly. As regards medical specialism, or that which relates to physician's practice, it has no basis in nature, and therefore cannot be attempted without detriment to the patient. Now, although it is not applicable to internal complaints, it may be of service in the surgical department. I think it is evident that a man who is always using his hands in a particular manner must gain a facility which others cannot possess, and hence the necessity of the oculist and the operator in some other special sections. I apprehend that the surgeon who did nothing but perform herniotomy would be more skilful in that operation than the one who did nothing but amputate, and *vice versâ*. To what extent the surgeon should thus subdivide himself with advantage is another question. The gynæcologist, in like manner, who is constantly making an examination of the uterus, must gain a facility of diagnosis which others cannot have; but, as regards the mere disturbances of the sexual organs, the general physician can equally take cognisance of them, seeing that they occur in connexion with every kind of disease. As a matter of fact, therefore, pure specialism can exist to only a limited extent; and the public are in error when they think that there are physicians with special hospitals devoted to the treatment of kidney, liver, heart disease, &c. The nearest approach to specialism in medicine proper is seen in the case of a general physician whose inclination leads him to the study of some disease, and writes a book about it. This will always be the case, but such men are not regarded as specialists either by the profession or by the public. The public opinion is virtually expressed in the words which I heard let fall the other day from a poor woman who had been sent to two of the leading hospital surgeons in London for cancer, both of whom had written on the subject. She was not content until she had seen the surgeon of a special cancer hospital (whose name was unknown to me), and then told her friends she had consulted "the head cancer doctor." If purely local diseases existed, something might be said in favour of specialism, especially if the medical attendant could proclaim with ease the part at fault, and recommend the proper person to put it right; but in a large number of cases this is quite impossible: the organisation of the body is too complex, and the difficulty of diagnosis too great. What really happens is that the patient judges for himself, both as to his complaint and his adviser. Thus many phthisical patients go to the throat doctor because they are hoarse, and, if women, to the gynæcologist because the menses have ceased. I have met with a great many instances of both kinds. If specialism were

instituted in its various branches by the profession, it is very difficult to say to what extent it would be allowed; but at present the system is said by some of its advocates to have been invented by the public, which is probably the case. The *vox populi* declares it is common sense that a person who devotes all his attention to one thing must know most about it, to which is added the corollary, which appears to me strictly logical, that the medical man who gives all his time to one subject must necessarily know less of others; how unfortunate, then, I have heard a patient exclaim, should he fall into the hands of the wrong man. I am sorry to say the public are perfectly justified in their fears, as I could show by numerous examples. I believe the statement is correct that the public, in contemplating the division in the mechanical arts, have demanded the same thing in our profession; specialism has been asked for, and the demand has created a good supply. The reason one is led to this view is that it is not otherwise apparent why some parts of the body are selected for the medical man's devotion rather than others. If there be no specialists for the pancreas or spleen, it would be probably because the public are not aware of the presence of these organs; whereas they are conscious, often too conscious, of those parts which constitute the orifices of the body, highly sensitive parts, and always before the ken of the patient; these are therefore to be found amongst the principal objects of the specialist's care, some taking the superior and others the inferior orifices. There may be also a more legitimate reason for this selection, seeing that these parts can be manipulated, and therefore can receive the undivided attention of the surgeon, who obtains, without doubt, a facility in handling them which others have not. As regards the evils from mistaken diagnosis, this is inevitable, for it is impossible for a man devoted to one object to discover the causes of disease as well as his fellows; this can only be done effectually by the general practitioner or by the general physician. And even pure clinical experience is not enough, as I have often proved; for it requires the addition of pathological knowledge to form a right conclusion: one is of no value without the other.

I must call your attention for a moment to the method of making a diagnosis. It amounts to no more than this in a large majority of cases: the probability in favour of the existence of one disease rather than another; the symptoms imply a certain derangement within the body, and you infer from your experience what the cause of this is. You must, therefore, be previously supplied with a category of disease, and out of this you choose one most accordant with the symptoms. Now, this category could not be made in the wards alone, it must be supplemented by post-mortem examinations. You may diagnose an intestinal obstruction, but the different causes which may have produced it can only be known by inspection after death. I might remind you here that general hospitals alone can give us the results obtained by this post-mortem inspection. I naturally think of my own institution, and recall the discovery of Bright, Addison, Hodgkin, and others. Visceral syphilis could never have been discovered at a venereal hospital. Again, all the great improvements in surgery, notably the antiseptic treatment in the excision of joints, have all been made in general hospitals. It is in the general hospitals, also, that medicine can be properly taught; the public are little aware that diseases of the heart, liver, stomach, &c., are taught to students by men whom the public in no way know as specialists. One reason why specialism is so favoured by the public and discredited by many men in the profession is that it is formed generally on a basis of treatment rather than for scientific ends. This is what the public like; but, at the same time, it partakes of that nature which often leads to charlatanism. Any man of scientific knowledge and feeling must be aware that some of the most useful inventions of the age have arisen from small beginnings and from facts which had apparently no value; also, that true workers labour for truth alone, in the *siccum lumen* of Bacon, and not for any result of practical good; they know that this must some day follow, but it is not the immediate object before them. Grand is the toast which is said to be given at the Mathematical Society in honour of mathematics—that it is of no use to anybody. Therefore, there must always be a number of workers of whom the world knows nothing, although the fruits of their discoveries may be made use of by others who gain the pecuniary reward. This holds true in medicine as in other branches of science, and therefore, whilst there are the silent workers, there are those who make use of the results in the more lucrative department of treatment.

In speaking of the progress of our art, it is impossible to overlook the fact of how much more intimate of late years has been the relation between medicine and surgery. Surgery at one time was occupied largely in the use of the knife for the removal of parts which failed to be cured; it now applies itself as a remedial agent, and assists the physician in the treatment of many internal diseases. Surgery as a mere piece of carpentry reached its climax when, a few years ago, two rival surgeons were able respectively to remove the upper and lower extremities, with the parts to which they were articulated. When I was a student, the surgeon would say to the patient with a diseased knee-joint, "I cannot cure you, but I can cut your leg off." The improvement in surgery has been due to two things, the employment of anæsthetics and the antiseptic treatment; for even if the surgeon had soared to the possibility of removing diseased structures from a scientific standpoint, the length of time required for the operation would have entirely frustrated his purpose. Anæsthetics have now allowed him to take deliberate measures for the manipulative treatment of various morbid processes. If a calculus cannot be got rid of from the kidney, the surgeon will cut it out, or remove the whole organ if diseased; and in a most remarkable case we were lately reading of, an Italian surgeon dilated a strictured pylorus, and cured his patient. One of the greatest successes from the physician's point of view is the treatment of empyema. A large number of lives are now saved by surgical interference, and sometimes with a complete restoration of the chest to its normal condition. In my younger days, when a patient was tapped, the greatest care was taken not to admit air into the chest; consequently, if the case were one of empyema, it was excessively rare for the whole of the matter to be expelled by the expanding lung, the amount drawn off being merely the excess above that which had occupied the lung's place from distension of the chest. A certain amount of relief was obtained, but the operation was again had recourse to, and then for the third and fourth time, until the patient sank with the chest as full as on the first occasion. It is obvious that, if the lung did not expand and no air was allowed to enter through the cannula, no matter could flow. It did not either occur to the physician at that time that the presence of the purulent fluid was injurious otherwise than by its mechanical action on the lung, so that, if the chest were not full of fluid, and there was no great oppression of breathing, there seemed no need of operation. We now, on the contrary, see the error of this, and that a localised empyema, comparatively small in amount, will affect the system injuriously, and gradually bring about hectic fever and wasting, as in suppuration elsewhere. Some of the most remarkable instances of recovery which I have seen from approaching death have been those of thoracentesis—cases where the chest has been opened and washed out, with immediate subsidence of all constitutional disturbance. And more than this, as in the case of a lad I had lately in the hospital, who was so ill and wasted that he apparently had only a day or two longer to live. On finding that he had empyema, his chest was opened, and he gained immediate relief. He then began slowly to recover, his chest falling in on one side, and the spine becoming curved. After some further time, however, I found the lung gradually expanding, and the chest filling out, so that very shortly the affected side was as large as the other, and the spine straight. There was no trace left, except the scar, of there having been any thoracic affection whatever. I apprehend that in such cases the lung becomes adherent, and so goes creeping down by means of pleuritic adhesions, after the manner of a plant with its tendrils. It is quite impossible that so painful and prolonged an operation as thoracentesis, with washing out of the chest, could have been performed in pre-anæsthetic times. Conservative surgery almost entirely owes its origin and progress to anæsthetics, seeing how tedious must necessarily be operations performed under this denomination; one of the most striking and important is that of the removal of carious bone and diseased joints. The propriety and success of such operations have already been realised by the dentist, to whom too much praise cannot be given for the wonderful remedial measures which he is able to adopt. There is scarcely a person above middle age who has not been relieved by his skill, and can still boast of the retention of teeth which, had he lived years

before, would inevitably have been lost to him. The method of removal of diseased parts is now carried to great perfection, and the surgeon sees some of the greatest triumphs of his art in the preserved limbs of his patients. He can now exclaim, in the words of our great poet ("Richard II.," Act v., Scene 3)—

> "This festered joint cut off, the rest rest sound;
> This let alone will all the rest confound."

And now a word about antiseptics as it strikes a physician or a looker-on. As regards the beneficial result of antiseptic surgery there can be no doubt, for rarely now do we see a case of pyæmia on the post-mortem table at Guy's, when formerly this was of almost daily occurrence. When, some years ago, I was writing a paper on pyæmia, I had no difficulty in collecting 150 cases from my own recent records. But the great fact which has struck me as an outside observer is, that the use of antiseptics has delivered the surgeon from the fear of infection, and allowed him to treat his wounds after purely scientific principles. Formerly, the terror of infection obliged the surgeon to put into practice the most unnatural and most unscientific methods of treatment; for it is remarkable that, if by chance he discarded these fears and adopted a rational method, he would often obtain as good results as he does now. I remember seeing the flaps of a thigh-stump stitched together by Mr. Bransby Cooper and unite in a few days by what was called the first intention; also the case of a boy under Mr. Aston Key, who had all the fingers of his hand crushed by machinery, lacerating the skin and breaking the bones, and which, being all plastered up, were found, after a week, rapidly healing and all the parts becoming cemented together. In one of the earliest recorded cases of ovariotomy, in the year 1837 (the organ removed is now in Guy's museum), the surgeon tapped the cyst, then turned it out, tied the peduncle, replaced it in the abdomen, sewed up the wound, and in a few days this had healed, and the patient was well. The operation exactly resembled what is done now, and with equal success, showing that if a scientific and true method is adopted the results must be the same; but between the performance of this successful operation nearly fifty years ago and a similar operation now what have we witnessed? The most extraordinary and unnatural devices put into practice in order to avoid this dreadful blood-infection; so that the best methods of treating the wound became a matter of secondary consideration compared with the great object of preventing or getting rid of the purulent secretion and other discharges which might act as septic poisoning. Now, if we consider for a moment how the body grows, by the formation of cells, fibres, and bloodvessels, and how this takes place in the mother's womb at a temperature of 100°, we are sure that nearly the same temperature must be necessary during the subsequent growth of parts as in the healing of a wound. Now, look at the extraordinary and unnatural conditions to which wounds were submitted, and ask yourselves if you can be surprised at the result. If two raw surfaces can only grow together when placed contiguous at a temperature of nearly 100°, what must happen to flaps of an amputated leg when left sticking out at the end of the bed, with water of the temperature of 60° constantly trickling upon them? Is it surprising that, under this treatment, the muscle looked like a piece of boiled beef, that the flaps sloughed, and that necrosis of the bone projecting quite out of the wound came to be looked upon almost as the normal process of cure? All this was done to get rid of the dreaded discharges which might infect the system; but it is obvious that the very delay in the healing process added to the chances of blood-poisoning. But even in those times I believe we were more natural and simple in our methods than the French, who would not allow the healing process to go on without being interrupted by the introduction of charpie into the wound, besides all sorts of unguents and other messes. A looker-on, as I am, who knows nothing of the details of dressing, sees now a scientific method of procedure adopted in distinction to a most unnatural and barbarous one of former years; and he witnesses the fact that, the fear of infection having passed, natural processes are allowed to pursue their own course. Knowing as a physiological fact that the temperature of the body is the same in all of us, although some may produce and give off more heat than others, and recognising that the balance is kept in whatever climate we may be, it wants but a moment's consideration to see how the relation between the blood and the tissues would be altered, the cells themselves undergoing a change, were not the temperature always the same. In these circumstances, if a wound heals, it must be placed under the same conditions as regards heat as the natural tissues during their growth, and the surgeon now looks to his wound to see that it is neither too hot nor too cold. With such facts before me, it does not seem remarkable that it is a better piece of surgery to stitch up a piece of injured intestine and put it back into the abdomen than to leave it outside, seeing that it is in the best condition to heal in the former position, and slough in the latter. One felt also equally sure that, as regards ovariotomy, a method adopted in the case I mentioned as occurring fifty years ago was the right one, that of replacing the stump in a cavity where the temperature would allow it to heal up rapidly. Regarding, therefore, the progress of our art, we cannot but look upon the assistance of the surgeon in cases which were once called strictly medical as an immense advance, and this has been accomplished by the discovery of anæsthetics, and by the use of measures which has allowed wounds to be treated on a scientific method.

The moral of my whole discourse is this. Advance in medicine must be looked for by a better insight into the causes of disease; by a study of pathology in its very widest signification, which shall include not only morbid anatomy, but all those changes in the blood and nervous system which often constitute the *fons et origo mali*. These causes may be found to be of a specific nature, or to exist in the ordinary surroundings of our lives. Of whatever kind they may be, a discovery of their detrimental influence will lead to the means of their removal. Then, again, much success may be hoped for on making a more complete study of diseases when actually running their course before us, by observing which are the favourable and which the unfavourable circumstances which determine the issue of the case; and not only the surroundings should be noted, but the meaning of the symptoms should be investigated, so as to discover which to encourage and which to oppose. When we have arrived at some knowledge acquired by these means, the action of drugs may be considered, and the conditions which suggest their employment. As I have before said, it is by no means sufficient to know the physiological action of a medicine, but rather how it will exert an influence on various pathological phenomena. To quote again the instance of digitalis, we require to know not only its action on a healthy heart and arteries, but what power it exerts on quick-acting hearts, for whose correction we now see it daily given. In upholding these views, I am of necessity protesting against the so-called popular theory that diseases are so many entities, whose symptoms are to be relieved by some drug; or, as I have seen it expressed in a book on the most widespread heresy of the day, that, since it has pleased the Almighty to visit his children with various ailments, so He has provided in the herbs of the field some remedy for their cure. This is both an untruth and an absurdity; or, as a member of Parliament declared in the House of Commons, when denouncing restrictions on medical practice, that all collegiate training was useless, the medical art being a gift with which some persons were naturally endowed. It need scarcely be said that he was the patron of the most flourishing quack in the county. If medicine is a branch of science, it must be studied in the same way as other sciences, by observation and experiment. There must first be a study of anatomy and physiology; then a study of disease, as seen in the living subject, and in its results on the dead; then, again, an investigation into the action of remedies of all kinds, and their suitability to the amelioration of morbid states. Efficient treatment can only follow a complete adoption of all these methods. By making it the result of a scientific procedure, we are assisting to stay the degeneracy of medicine, which is ever apt to constitute treatment the very foundation of our art, the alpha as well as the omega.

A "PALACE OF DELIGHT."—As a memorial to the late Sir Titus Salt, and in recognition of his benefactions to Saltaire, the Governors of the Salt Schools have decided to build a new Science and Art School, costing about £6000. The building will be completely finished by May 15th, 1886, on which day will be opened an important Exhibition on the lines of the late International Inventions Exhibition. For this purpose the present buildings and a field of six acres will be utilised, the whole being named the "Palace of Delight," in allusion to the ideal institution delineated in Mr. Walter Besant's "All Sorts and Conditions of Men." Accommodation will be provided for over 10,000 people.

THREE MORE REMINISCENCES OF

PROCEEDINGS CALCULATED TO IMPEDE THE FREE PROGRESS OF A SCIENTIFIC KNOWLEDGE OF FACTS IN NATURE.

By T. WHARTON JONES, F.R.C.S., F.R.S.

I. *Historical Notice of my Strictures on Dr. Martin Barry's Observations relating to the Corpuscles of the Blood and the Origin of "Fibre."*—The pages of the Philosophical Transactions being as yet still at the disposal of Dr. Barry as a receptacle for the contents of his note-book, there appeared in the volumes for 1840 and 1841 memoirs on the Corpuscles of the Blood, the blunderings of which were again hailed as "new discoveries by Dr. Barry." In my "Observations on the Anatomy, Physiology, and Pathology of the Blood," which were published in the *British and Foreign Medical Review* for 1842, I exposed the unfounded character of Dr. Barry's speculations, and in reply my strictures were denounced as *misrepresentations*. Again, in 1842, Dr. Barry published in the Philosophical Transactions a memoir on Fibre, transcending in fantasticalness not only his papers on the Corpuscles of the Blood, but also his researches in Embryology. As the name and authority of the Royal Society had thus been degraded in giving credit and currency to nonsense, I considered it my duty as a Fellow to endeavour to point out the simple facts. I accordingly communicated a paper, which was read at one of the meetings of the Society, exposing Dr. Barry's absurd speculations. The effect of this was to complete the extinction of the prestige as an authority in science that Dr. Barry had acquired, though it tended at the same time to increase ill-will towards myself. Dr. Barry never again published any more "discoveries." The following was the introduction of my paper:—

"The history of science unfortunately presents many examples of truth set aside and replaced by error; the history of the Royal Society is not without such an example. In the year 1818 there issued from this Society, through the medium of the Philosophical Transactions, errors by which some important facts in the physiology of the blood, ascertained and in part announced to this society some fifty years before, were for a time supplanted. It is only within these very few years that the errors of Sir Everard Home have been exposed and the general accuracy of Mr. Hewson's observations of facts in nature recognised. There has lately appeared in the Philosophical Transactions a series of papers on the Corpuscles of the Blood and on Fibre, which contain errors not less grave than those just referred to as having been promulgated by Sir Everard Home."

The pages of the Philosophical Transactions, it is to be remembered, had been at the disposal of Sir Everard Home for the insertion of anything he chose to publish, just as they were at this time at the disposal of Dr. Barry. French *savans* used sarcastically to comment on the *luxe* of paper, printing, and engraving expended in the publication of Sir Everard Home's *niaiseries*.

In the reading of my paper, Mr. Hunter Christie, at that time the junior secretary of the Society, omitted this introduction. The reference to Sir Everard Home's errors gave great offence in certain quarters. For example, Sir Benjamin Brodie, caring more for Sir Everard Home's pseudo-scientific reputation than for Mr. Hewson's really scientific facts, denounced it to a friend of mine as "bad taste"! *Bad taste*, if you will; it was, nevertheless, *honest taste*, and in fulfilment of the obligation I came under to the Royal Society when I signed my name in the Charter Book.

II. *Historical Notice of the publication of my Papers on the Blood-corpuscle in its different Phases of Development in Vertebrate and Invertebrate Animals.*—These papers, in a series of three, appeared in the Philosophical Transactions for 1846. My undertaking of the microscopical study of the blood-corpuscle in invertebrate as well as in vertebrate animals was regarded with jealousy by certain persons who, themselves unable to investigate the subject, endeavoured to prevent another engaging in the work. And the work, when done, had to run the gauntlet of obstruction. In the reading of papers at the meetings of the Royal Society the usual course was to take each paper in its turn in respect to the time when it was received. My papers were delivered in full time to have been duly read in the course of the session of 1845, but they were kept back until the last meeting, when their titles only could be announced. The mode in which this was brought about was as follows:—Dr. Roget, the then senior secretary, represented to Mr. Samuel Hunter Christie, the then junior secretary, in whose custody the papers were, that, as they were long and elaborate, he would like to have them at once for the purpose of making an abstract of them for the Proceedings. In accordance with this request, Mr. Christie delivered the papers, though unread, to Dr. Roget, who retained them, so that they could not be read at all. Mr. Christie told me this by way of apology for not duly reading my papers at a meeting of the Society in their turn. The papers could have been duly read, and sufficient time left thereafter for writing an abstract. The apology, therefore, was no apology at all.

Story of the Abstract.—Dr. Roget, having thus obtained possession of my papers under the pretext of having an abstract of them prepared in time for the Proceedings, appears not to have done anything whatever in the matter, for soon after the close of the session he wrote asking me to supply him with an abstract. This I would have been ready and most happy to have done any time long before. On receiving Dr. Roget's application, however, I immediately set to work and prepared one from a transcript made for me by Mr. Huxley before the originals were given into the Royal Society. Along with the manuscript of the abstract, I sent a note saying that I hoped it was not too long, and that I would like to see a proof of it for revision. To this I was favoured with *no acknowledgment*. When the Proceedings were published, I found that the abstract I had supplied was not inserted. Instead of it there was what purported to be an abstract, but which was a tissue of misrepresentations. Indignant at this conduct, I immediately wrote to Dr. Roget, asking if he had not received the abstract which I had drawn up and sent to him as requested. To this inquiry Dr. Roget replied (Jan. 1st, 1846), complaining of the *dryness* of my letter, but giving no explanation of his conduct, whereupon I addressed him as follows:—

"35, George-street, Hanover-square, Jan. 2nd, 1846.

"Sir,—On the day I wrote to you I saw for the first time the abstract of my series of papers on the Blood-corpuscle in the Proceedings of the Royal Society, and, finding it altogether incorrect, a doubt occurred to me whether the abstract, which at your request I had taken much pains to prepare, had ever reached you. So much for my grounds of doubt. As to my object in proposing the question, it was in the event of my finding it necessary to take any step in the matter that, supposing you had never received the MS. of my abstract, I might avoid attributing to you unjustly a disregard of the means of ensuring accuracy in the abstract of my papers which I had supplied, and which I proposed further to ensure by revising the proof. To what I have now said I must frankly add that, even supposing you did not receive the abstract which I sent, I cannot avoid complaining that that which has been printed bears evidence of gross carelessness in the preparation of it, if not incompetence, seeing that in it no mention whatever is made of one of the chief points which it is the object of the papers to establish, and that what is said of another important point, if it has any meaning at all, has a meaning the reverse of what I really say—in short, that the abstract as a whole is a tissue of nonsense and misrepresentation, little honourable to the Proceedings of the Royal Society, and injurious to my scientific reputation. So injurious do I fear the abstract likely to prove for the time, that I have felt myself compelled to write to the *Medical Gazette*, which copied your abstract into its pages last week, denouncing its utter incorrectness.

"I remain, Sir, your obedient humble servant,

"T. WHARTON JONES."

In my papers I directed particular attention to the large nucleated red corpuscles in the blood of the early mammiferous embryo similar to the red corpuscles of the blood of the oviparous vertebrata, and insisted on their homology with the nucleated corpuscles without colour or but slightly tinged which I found in the blood of the mammifera at a period advanced beyond their early embryonic state and subsequently. This point was wholly misrepresented in Dr. Roget's abstract, and it was not long before the misrepresentation was, as I feared it would be, taken notice of and held up as a manifestation of ignorance on my part. This was, for example, done by the late Professor Bischoff,

of Munich. He, however, did not with equal alacrity recall his hasty criticism when he came to see the true account of my observations in the complete papers, with their illustrative figures, as published in the Philosophical Transactions. This was the same Professor Bischoff who had denied the accuracy of my discovery in the rabbit of a choroidal investment around ova in the Fallopian tube three days post coitum, but who, on finding out the fact to be as I had represented, rather disingenuously described it afterwards as if it had been an original observation of his own, merely adding, "Wharton Jones agrees with me"! Certain nucleated blood-corpuscles, with the cell-wall totally destitute of colour and so pale as scarcely to be discernible, and others with a slight degree of colouration of the wall, were objects of particular description. In the illustrative drawings much pains had accordingly been taken to represent this; and the Physiological Committee, in recommending the papers for publication in the Philosophical Transactions, suggested that the engravings should be tinted like the original drawings.

The publication of my papers was duly ordered by the Council, but the tinting of the figures was not allowed, on account of the additional expense which it was alleged would thereby be incurred. When I heard of this decision of the Council, I wrote a letter to the Marquis of Northampton, the then president, in which I commented strongly on the inconsistency of thus impairing the exposition of one of the main facts described in my papers in order to save the outlay of some twenty or thirty shillings. The result was that the Council annulled the decision they had before come to, and the tinting of the figures was allowed. This pretext as to expense was a fitting complement to the false abstract in the Proceedings, and was raised apparently as a last effort to depreciate the papers, by rendering them less likely to be understood.

At the time when my papers were before the Royal Society thirty-eight years ago, I urged, in a remonstrance to the Council which I made against the treatment they were receiving, the importance of the facts therein recorded, and especially the remarkable changes of shape which the white corpuscles undergo in a drop of blood as soon as it is abstracted from the living body. A few years ago the facts were reproduced as *new discoveries* in Germany, and it was only on receiving this news from abroad that the blind and incapable pretenders at home began to recognise them. Along with this recognition of facts, tardy as it was, they, however, accepted with easy faith the erroneous doctrine which came to be superadded—viz., that the corpuscles in question undergo amœboid changes of shape *while within* the living vessels, and thereby bore through the walls of veins and capillaries in inflammation. Oddly enough, moreover, there was lately a controversy as to a supposed discovery of colourless cells, with strongly marked nuclei but extremely pale walls, in the blood of vertebrata. Such were the very cells which I took so much pains to describe and delineate in the papers under notice, and which I so much wished should be distinguished from others of a slightly red tinge that I urged on the Council of the Royal Society, as above mentioned, the importance of having the illustrative engravings tinted like the original drawings.

III. *Historical Notice of how it was that the late Dr. Augustus Waller became acquainted with the method of tracing Nerve Fibrils in their ultimate distribution by section of the Trunk.*—Somewhat more than thirty years ago the late Dr. Augustus Waller communicated to the Royal Society a paper in which he described the terminations of the nerve fibrils in the papillæ of the tongue as free ends with an aperture in them. The paper having been referred to the Physiological Committee, Mr. Owen and myself were delegated to examine into the point. In fulfilment of the duty thus imposed upon me, I repeatedly received Dr. Waller at my house, to give him an opportunity to demonstrate the alleged structure, but I could never satisfy myself of the existence of free perforated endings of the nerve fibrils, though I bestowed on the inquiry a good deal of my time and pains. I accordingly made my report to the Physiological Committee to that effect. I do not know anything of Mr. Owen's microscopical examinations, but he reported in favour of Dr. Waller's paper, and at a meeting of the Physiological Committee attempted to bear me down and to disparage the authority of my report by saying that I had made my microscopical examinations of the structure by artificial light only, implying that by such investigations nothing trustworthy could be made out. The unfounded assertion that my microscopical examinations had been made by artificial light only I repelled with heat and indignation, on account of its daringly gratuitous character. The fact was that I received Dr. Waller's visits at my house usually about two o'clock in the day, never in the evening, though I myself then took the trouble to supplement his demonstrations with microscopical examinations of my own by artificial light. Of course, if there had been any such structure as that contended for by Dr. Waller, it would have been seen under the microscope illuminated by clear lamplight, as well as by daylight; but Mr. Owen, notwithstanding his pretensions, was no authority in such researches. He seemed to have forgoten the share he had in giving currency to the errors of Dr. Martin Barry, and in putting aside my paper on the Ova of Man and the Mammifera, and my independent discovery in them of the germinal vesicle. Mr. Owen knew nothing of the conditions under which I made the microscopical examinations. He may have spoken on the faith of allegations made to him by Dr. Waller. If Mr. Owen's object was to disparage my authority by making it appear that I had not conducted the examination properly, he ought, according to parliamentary usage, to have questioned me, and not have recklessly asserted what he did not know to be true.

The Physiological Committee adopted my report, and declined to recommend Dr. Waller's paper for publication in the Transactions. Dr. Waller appearing to me extremely anxious to work out something, I regretted that I could not endorse his view about the nerve fibrils in the papillæ of the tongue. One day, therefore, at my house, when he was trying to convince me, I said in pure kindness that it was of no use, but that I would put him in a way by which he might perhaps make out something of importance in regard to the ultimate distribution of nerve fibrils bound up in any particular trunk. In the course of the experimental researches into the effect of section of the ischiatic nerve of the frog on the circulation in the web, in which I had been for some time before that engaged, I had become familiar with the already known broken-up and granular appearance of the medulla in the extreme nerve fibrils, as seen under the microscope, which supervened on the section of the trunk in the thigh. From this I had conceived the original idea that section of a nerve trunk might prove a method of tracing the peripheral distribution of the nerve fibrils bound up together in it. Not being disposed to undertake the experimental investigation of the subject myself, I told Dr. Waller of the fact that, after section of a nerve, the medulla in the extreme fibrils is seen under the microscope to present a broken-up and granular appearance, and explained how the peripheral distribution of the nerve fibrils cut in the trunk might be thereby traced.

Let it be here particularly observed that, in communicating to Dr. Waller this method of experimental research into the peripheral distribution of nerve-fibrils, I fully meant that as a matter of course Dr. Waller would be entitled to all the credit of the results he might thereby obtain. It could not, however, be said that the method was Dr. Waller's. It would have been contrary to truth on my part to say that it was so, or to let it be so understood, if the question had been raised. Dr. Waller readily took hold of my suggestion, and applied to the Royal Society for a grant of money to carry out the experimental research. The money having been granted, Dr. Waller went to Bonn, where, under the guidance of Professor Budge, he prosecuted the inquiry. Dr. Waller, however, seems not to have continued to maintain a good understanding with Professor Budge, seeing that the latter issued a pamphlet (a copy of which he sent to me) complaining of Dr. Waller. I do not now remember the exact cause of quarrel. Being otherwise engaged, I took no interest in the matter, nor in the paper which Dr. Waller communicated to the Royal Society on the result of his experimental researches by the method I had taught him. But one day in the Professor's common room in University College I met the late Dr. Sharpey, who told me, in conversation, of the results which Dr. Waller had obtained regarding the distribution of nerve fibrils by a method of research which he had adopted. Whereupon I informed Dr. Sharpey most distinctly and unmistakably that the method was my own, and that I had communicated it to Dr. Waller. Subsequently Dr. Waller applied to me for a certificate to assist him in his candidature for some office. I gave him the desired certificate, at the same time remind-

ing him that he owed his knowledge of the method here under notice to me. I did not mention the fact in the certificate, but I expressed myself in such a way as not to imply that Dr. Waller was the author of the method, which would have been contrary to truth.

I heard nothing more of the matter until some time after, when a Royal Medal was awarded at the Royal Society to Dr. Waller for his researches. The president, in his address on the occasion, dwelt, not on any results of the researches, but on the *excellence and originality of the method* of investigation as being what entitled Dr. Waller to the honour. On reading the report of this in the Proceedings, I felt that if I allowed the misrepresentation to pass unchallenged I should be conniving at it. I accordingly addressed to the president and Council of the Royal Society a statement on the subject such as I have given above. Dr. Sharpey, the then physiological secretary, officially acknowledged the receipt of my statement, but without any explanation. That statement of mine will be found in the Archives of the Royal Society; and I here refer to it in denial of the allegations of which the president was the mouthpiece, and in denunciation of the tacit assent to them by Dr. Sharpey and Dr. Waller, though conscious of their unfounded character.

Postscript.—The reference in Reminiscence No. II. to the erroneous allegation that the white corpuscles undergo amœboid changes of shape while the blood is still within the living vessels reminds me that I have not seen any reply from Mr. Marshall to the interpellation I addressed to him in my article on Vascular Congestion in THE LANCET of July 18th and 25th. I here repeat the interpellation in the hope that Mr. Marshall will yet offer some explanation of the allegations made by him in his Hunterian Oration as to the emigration of white corpuscles in inflammation. I consider Mr. Marshall bound in duty, as a scientific pathologist, to say whether or not he has verified as a fact the alleged emigration, or on what grounds he held himself justified to speak *ex cathedra* in the manner he did.

In exemplification of how facts which admit of being easily ascertained by simple observation may be overlooked, I append the following instance. Notwithstanding all that is constantly being said and written about the motions of the pupil, professors and authors utterly ignore a fact which constitutes the very key to a scientific elucidation of the subjects—viz., that when the iris is in a state of complete muscular relaxation, as it is after death, when all the vital contractility of its muscular fibres has become annihilated, the pupil is found of *middle width*, neither much dilated nor much contracted. This fact I insisted on in a paper in the *Edinburgh Medical and Surgical Journal* on the "Motions of the Pupil," which was published more than fifty years ago, and showed that the state of the pupil in question depends on physical elasticity of the structural framework of the iris, which of course continues after death, and which operates during life in constant intermediate antagonism to the action of both the sphincter and dilator muscular fibres, so that in paralysis of the former the pupil is not fully dilated by unrestrained action of the latter, nor in paralysis of the dilator muscular fibres is it fully contracted by unrestrained action of the sphincter. (See the successive editions of my "Ophthalmic Medicine and Surgery," in which, especially the third edition, the subject is discussed in detail.) I may here call to mind that in paralysis of the third nerve the pupil remains in the middle state of width, or but slightly dilated beyond it, but becomes fully dilated as usual under the influence of atropia; the elasticity of the iris, which previously resisted the ordinary force of the contractility of the dilator muscle, being overcome by the force of that muscle, now excited to increased action by the atropia. I would also mention that the great dilatation of the pupil which may be seen to take place at the moment of death is not owing to paralysis of the sphincter muscle, but is the effect of spasmodic contraction of the dilator. This contraction ceasing some time after death, the elasticity of the iris brings the pupil into the middle state. In the iris of the bird's eye it is to be noted that there is no dilator muscle of the pupil; there is only a very strong sphincter. The completely dilated state in which the pupil of a bird is found after death is owing to the elasticity of the iris in that direction, and which during life is in constant antagonism to the strong sphincter muscle.

In THE LANCET of August 1st, 1885, there is a reclamation by Dr. George Johnson against the observable fact in nature, that the extreme ramifications of the pulmonary artery do not undergo much, if any, constriction of calibre, which I adduced as militating against the notion that the impeded pulmonary circulation in the collapse stage of cholera could be owing to constriction of the calibre of the arterioles in the lungs. Dr. Johnson has evidently not studied very closely by direct observation the phenomena in nature to which I refer. Might I, therefore, suggest to him to devote some prolonged attention to the examination, under the microscope, of the state of the vessels in the lung of the frog and water-newt and the phenomena of the flow of blood in them, before he discusses the question further. Dr. Johnson appears never to have repeated the experiment of directing a slight draught of carbonic acid gas on a part of the frog's lung under a microscope, so as to observe the effect on the flow of blood in the capillaries of the part. I would therefore also suggest to him a study of this most important point. Until Dr. Johnson has devoted himself to the investigations mentioned, it would be useless on my part to say anything more in reply. I may here explain that my acquaintance with the discussion at the Medical and Chirurgical Society was derived from the report in the *British Medical Journal*. This report I took as I read it, and anything I said implying a mistake as to capillaries, instead of arterioles, was merely suggested thereby. However, I am only too glad to know that Dr. Johnson repudiates the looseness of expression which is so common. In conclusion, I would draw attention to the peculiar abrupt manner in which the pulmonary arterioles end in what I may figuratively describe as *brushes* of capillaries, and in which venous radicles abruptly commence by the inosculation of similar *brushes* of capillaries. This peculiar abrupt termination of pulmonary arterioles in the capillaries, and equally abrupt commencement of pulmonary venules by the sudden inosculation of capillaries, as seen in the frog, are represented with wonderful accuracy by Marcello Malpighi, the discoverer of the capillaries, in the engraving illustrating his work "De Pulmonibus." In contrast with this, as regards the *aortic system*, it will be seen in Plate IV. of my Essay in Guy's Hospital Reports for October, 1850, that the arterioles of the frog's web are actually of narrower calibre than the capillaries into which they open.

CASE OF PRIMARY MALIGNANT DISEASE OF THE PLEURA.

BY WM. COLLIER, M.D. CANTAB.,
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A. W——, a wheelwright, aged forty-three, was admitted to the infirmary on April 11th, and died June 7th, 1885. His illness commenced towards the latter end of December, 1884, with shortness of breath, slight difficulty in swallowing, and occasional pain of sharp stabbing character over the base of the right lung. The dysphagia increased markedly during the six weeks previous to his admission, and was accompanied by rapid loss of flesh and strength. With the exception of a slight injury to the right side of his chest five years ago, he had throughout life enjoyed very good health. Family history satisfactory.

Condition on admission.—He was a tall, strongly built man, with an anxious expression, and markedly emaciated. Temperature and respiration normal; pulse 72. He had great difficulty in swallowing the smallest portions of solid food. Right lung: expansion diminished; tactile fremitus diminished, with almost absolute dulness, and distant feeble breathing over the lower half of the lung, back and front. Left lung: loud pleuritic friction heard at the base on the anterior aspect. On measurement, the circumference of the right half of the thorax, one inch below the nipple, was three-quarters of an inch greater than the opposite side. A small No. 3 œsophageal bougie was passed into the stomach without difficulty and without meeting any obstruction.

On May 13th, a month after admission, the man had lost 1½ st. in weight, his dysphagia had slightly increased, and his breathing was daily becoming more embarrassed: the dulness on percussion, loss of tactile and vocal resonance, and distant bronchial breathing were more marked; and the right half of the thorax, an inch below the nipple, now measured an inch more than the left. An aspirating needle, introduced in the fourth interspace in the axillary line, withdrew about half a drachm of blood, which, when

examined microscopically, exhibited nothing abnormal. From this date the patient steadily lost ground, and died on June 7th.

Necropsy.—On the under surface of the diaphragm a few small, white, hard nodules were seen. The right pleural cavity contained about two pints of encapsuled, blood-tinged, serous fluid, the lung itself being pushed upwards and to a great extent collapsed. The pleura lining the lower half of the right side of the thorax, the diaphragm, and a small portion of the pleura on the left side of the thorax, was enormously thickened, being from half to three-quarters of an inch in thickness, smooth and hard, so that in appearance and section it strongly resembled cartilage. The lower part of the œsophagus was slightly thickened, and as it passed through the opening in the diaphragm, it was so much pressed upon by surrounding thickened tissues as to admit with difficulty the tip of the little finger; its endothelial surface was throughout smooth and healthy. The glands in the posterior mediastinum and the deep abdominal glands were enlarged and hard. The stomach and intestines were examined, but without discovering any traces of malignant growth. The other organs of the body were healthy. Stained sections of the thickened pleura were composed almost entirely of fibrous tissue, scattered throughout which were numerous collections of flattened epithelial cells, concentrically arranged in alveolar spaces. Sections of the abdominal glands exhibited all the characters of colloid degeneration.

Remarks.—From the outset this was regarded as a case of malignant intrathoracic growth. The fact of an œsophageal tube being passed into the stomach without encountering any obstruction suggested a growth external to and pressing upon the œsophagus. The dulness over and distension of the base of the right lung pointed to pleuritic effusion. After the introduction of the aspirating needle, with a negative result, the physical signs were thought to be due to a growth in the lung or pleura. The needle probably failed to reach the fluid in consequence of the extreme thickness of the pleura. The fact that the abdominal and mediastinal glands were the only other structures in which malignant changes could be discovered would point to its being a primary epithelial cancer of the pleura. In any case, the extraordinary and uniform thickening of the pleura, with an absence of nodulation, &c., would, I think, make the case worth recording. It might have been a malignant infiltration of a previously thickened pleura; but the fact of only a small portion of the left pleura lining the diaphragm being involved, and that in direct continuity with the right, would render this doubtful.

LARYNGEAL SPASM CAUSED BY COCAINE SPRAY.

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UP to the present time, though cocaine has been most extensively employed, I have not heard of any mishap attending its use. The following case, however, shows that in certain subjects it requires to be employed with caution.

P. R——, a lady of the age of fifty-six, came under my care in July, suffering from asthma. On examination, I found both nostrils filled with mucous polypi. She had frequently been operated on, the last time six years ago. In six sittings I completely cleaned the nostrils by means of the electric cautery; the patient, who had much experience of other forms of treatment, expressed her opinion most decidedly in favour of the plan adopted. Cocaine in a 20 per cent. solution, applied with the brush, greatly facilitated the operation by abolishing the sensibility of the mucous membrane, and by the power it has of causing contraction of the erectile tissue of the nose, thus enabling the operator to get a good view of the posterior part of the nasal cavities. As the patient found the heat of London very trying, it was agreed that she should go home and return for the completion of the treatment in October. Accordingly, she presented herself on October 5th. Since the patient's last visit I had bought the cocaine spray apparatus introduced by Dr. Miller of Windsor, and, as I had used it frequently before, I began to spray the interior of the patient's nose with a 10 per cent. solution. The nostrils, being no longer blocked, allowed the spray to pass into the throat. In the course of a few minutes the patient complained of a feeling of cramp in the throat. She soon became very excited, stood up, and gasped for breath; her countenance assumed an ashy hue, the hands were cold, and the pulse very frequent and feeble. Inspiration was attended with a roaring sound. Speech was not affected. There was deficient entry of air over the chest, but no abnormal sounds were audible. The symptoms clearly pointed to spasm of the adductors of the vocal cords, a condition resembling laryngismus stridulus. The distress was so great that I did not venture to suggest a laryngoscopic examination. With difficulty I persuaded the patient to recline on a sofa, and I administered chloroform, which relieved the spasm, but she was not sufficiently recovered to leave my house until after the lapse of four hours from the commencement of the attack. Next day she was in her usual health. A few days later I completed the treatment by destroying with the galvano-cautery the mucous membrane from which the polypi sprang, taking care, however, to apply the cocaine with the brush, and not to allow any to enter the throat. The patient is distinctly neurotic, and had suffered from similar though slighter attacks on two previous occasions.

That this is quite an unusual accident in the employment of cocaine is shown by the fact that, though I have frequently applied a 20 per cent. solution directly to the larynx, the only complaint I have had has been on account of the bitter taste of the drug.

A CASE OF
EPITHELIOMA OF THE UTERUS.

REMOVAL OF THE OS; CICATRICIAL CLOSURE OF THE UTERINE APERTURE; RETAINED MENSTRUAL FLUID DRAWN OFF BY TAPPING; SUBSEQUENT LARGE DAILY DISCHARGES OF FLUID.

BY GEORGE WHERRY, M.C., F.R.C.S.,
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A VERY pale fair woman, not quite twenty-four years of age, was admitted into Addenbrooke's Hospital, under my care, in May, 1884, suffering from a rapidly growing epithelioma of the os uteri, which did not involve the vaginal passage. She had been married five years. There was no suspicion of syphilis. She had two healthy children, the younger sixteen months old. During more than two years past (both before and after the younger child's birth) she had almost daily losses of blood, sometimes so considerable as to produce blanching, but rarely a day without some hæmorrhage; with this there was never any pain. The growth was removed per vaginam, with the whole of the os and part of the cervix uteri, by dissection with scissors and the wire écraseur. There was smart bleeding after the operation. The wound was dressed with an ointment of iodoform, eucalyptus oil, and vaseline. A rapid recovery followed, and she went back to her village to be an out-patient. She was examined by me three months after the operation; there was a perfectly healthy cicatrix, and a sufficient opening into the uterus. She had gained weight and looked wonderfully well and strong, menstruated regularly, and had no unusual discharges.

In May, 1885, about a year after the operation, the patient came looking ill and worn. She had lost flesh, her abdomen was distended, and she thought herself pregnant. She stated that she was well until three months ago, when she experienced great pain at the monthly periods, and sometimes pain also during micturition. There was always a natural amount of discharge at the periods, but lately not quite so much. On examination there was no recurrence of the epithelioma, but no uterine orifice could be found. There was a large swelling in the region of the uterus; the signs in the abdomen might suggest ovarian disease. Several attempts were made with stricture catheters and probes to find an opening into the uterus; these were unsuccessful. No fluid could be forced through by pressure on the abdomen. The patient was readmitted, and on June 20th it was noted that she had menstruated during the five days past, and the nurse informed me that there was a natural quantity. On the 23rd the uterus was tapped with the recto-vesical trocar, and 56 oz. of tarry fluid were drawn off in portions.

The cannula was tied in and plugged with an air-tight peg. On the 24th 30 oz. came away; on the 25th about the same quantity; and on the 26th, 10 oz. The patient hitherto had been doing well, but now had rigors, high temperature, and a crop of herpes labialis; the fluid from the uterine cavity became very foul, and was passed in great quantity. The silver tube was withdrawn, and a large lithotomy tube tied in. The fever abated after antiseptic syringing of the uterus. The measured quantities of fluid passed were as follows:—June 27th, 30 oz.; 29th, 50 oz.; 30th, 59 oz.; and the following fourteen days an average of about 10 oz. The patient recovered up to a certain point, the uterus discharged less fluid, and the abdomen, which had been tender and swollen, was painless and diminished in size. Quinine and ergot were given. The strength and appetite returned, and the patient left her bed for a couch in the open air, but passed again through a long illness, with alternating recovery and relapses. Any removal of the tube from the uterus or neglect in syringing was sure to be followed by fever and foul discharge, with swelling of the abdomen. On Oct. 6th, 1885, it was noted that the uterus could not be felt above the pubes, and was not tender; a tube pessary was draining the uterine cavity. There was not much discharge, and no evidence of any recurrence of the epithelioma. Her general health, however, was not yet satisfactory. She had had cough, loss of flesh, sweats, and occasional rises of temperature. Nevertheless, her strength and appetite were returning, and she was able to leave her bed daily.

Remarks.—In this case a short absence on the part of the patient led to a serious distension of the uterus, and probably also of the Fallopian tubes, from closure of the uterine orifice. Pain at her periods and swelling of the abdomen were the prominent signs. There was at no time any lack of a menstrual flow. In noticing the youth of the patient, who was not twenty-four when the operation was performed, I may add that she began to menstruate at the age of fourteen years. The clinical study of the case, and subsequent examination of sections of the growth under the microscope, leave no doubt of the nature of the disease. The growth of epithelioma of the os in young subjects sometimes progresses with frightful rapidity. Delay is dangerous. There should be no hesitation about operating in a suitable case. The functional activity of the uterus would seem to favour a recurrence of the growth, and either subsequent pregnancy or the periodic vascularity of menstruation would predispose to a return of the disease. Also there is the danger of closure of the uterine orifice if the patient is not under observation. Perhaps good success might be obtained by removal of the ovaries through small abdominal incisions, combined with amputation of the diseased vaginal portion—a combination which appears to me less formidable than extirpation of the uterus. This patient is already wishing to return to her husband, and I look with anxiety for her future. Meanwhile this record may serve as a warning to prevent a closure of the uterine orifice, with the view of preventing a disaster which here so nearly proved fatal.

INFLAMMATION OF COWPER'S GLANDS.

By ALEX. BOWIE, M.B., C.M.

THE following case is of some interest, not only because of the rarity of the affection and its unusual termination, but from the fact that the urethritis, of which the glandular inflammation was a complication, was the result of a gleet, apparently cured, resuscitated into the acute stage by coitus.

The patient, a male aged twenty-nine, consulted me on June 1st, 1884, complaining of painful micturition, pain in the perineum, and a discharge from the urethra. In April, 1883, he consulted a doctor because of frequent nocturnal emissions. Early in the succeeding May he contracted gonorrhœa. For this he was treated, and dismissed "cured" in seven weeks from the date of exposure, nothing unusual having occurred during the course of the disease. Shortly afterwards he noticed a discharge from the penis when in the society of ladies. It was evidently prostatic and (to use his own words) "clear and transparent, just like white of egg," inconsiderable in quantity, usually only sufficient to glue the lips of the meatus together: it never appeared yellow, and there did not exist any pain. In May, 1884, just twelve months after contracting the gonorrhœa, he married. Three weeks afterwards he came under my care. He had had coitus twice since marriage. Immediately after the second time he felt discomfort about the penis, which rapidly developed into pain, with profuse yellow discharge and all the symptoms of the acute stage of gonorrhœa. The pain on micturition was severe, and caused him to retain his urine for hours after experiencing desire to void it; it was also acute after walking and during defecation. The pain was referred to the perineum, and, upon deep palpation, behind the bulb of the corpus spongiosum could be felt two bodies, the size of small hazel-nuts, situated one on each side of the median line, evidently enlarged and inflamed Cowper's glands. They were exquisitely painful, and pressure upon them excited the desire to micturate. His general health was considerably upset, with furred tongue, constipation, and a temperature of 100·6°. Under rest in bed, hot fomentations applied to the perineum, and the internal administration of the extract of pulsatilla, the patient was convalescent in four days, and in six days more returned to his business. The discharge remained more or less for three weeks and was treated on general principles.

Here I would draw attention to the use of pulsatilla in cases such as the above. Previously I had had experience of its beneficial action in acute inflammations of the testes and prostate gland. Two drops of the extract were administered every four hours, and the almost immediate effect was a marked diminution of pain; micturition was rendered tolerable, and within four days painless; the discharge from the canal greatly decreased during its use, and I feel convinced that the rapid recovery and the avoidance of abscess were due largely to its employment.

Richmond-road, Bayswater, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. THOMAS'S HOSPITAL.

FRACTURE OF THE SACRUM; RETENTION OF URINE; CYSTITIS; THROMBOSIS OF THE FEMORAL VEINS; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. FRANCIS MASON.)

FROM the position of the sacrum, braced in by the pelvic girdle, and from its thickness and spongy texture, it is less liable to fracture than any other of the pelvic bones. Simple fracture of this bone, unaccompanied by fracture of other bones, is caused, as in this case, by severe and direct violence; and there are few recorded examples of it. The severity of the injury was proved by the comminution of the bone.

For the report of the following case we are indebted to Mr. Burke.

M. H——, aged forty-five, a bricklayer, was admitted into Leopold ward on March 23rd, and died April 28th, 1885, thirty-six days later. The patient was at work outside a house, and stepped on a plank which had not been properly secured; this tipped up, and he fell to the ground, a distance of about thirty feet. When admitted he was unconscious and in a state of collapse, the lips were livid, pupils equally dilated, and pulse feeble, rapid, and intermittent. When he recovered consciousness he complained of pain, especially down the anterior part of the left thigh, which was worse on attempted movement; there was some loss of power in the left lower extremity, but the patient could move the toes freely; the left foot was colder than the right; there was no loss of sensation. He was unable to lift the right arm, and, if it was flexed beyond a right angle, suffered pain. There was marked tenderness in the lumbar region, with hyperæsthesia, the patient wincing when the hand was gently laid on the part, which was covered with perspiration. A large bruise was found on the left side, extending from the scrotum outwards to the left anterior superior

spine; there was also some extravasation extending upwards into the abdominal muscles from this; all over this region there was great tenderness. The left side of the pelvis appeared loose; there was no crepitus, and the impression given was that of a fracture in the pubic portion of the left os innominatum. The patient vomited soon after admission; there was no blood in the vomit. The urine was drawn off; there was no blood in it; sp. gr. 1020, acid, and apparently normal. An injection of a quarter of a grain of morphia was given at night, and a one-grain opium pill ordered every six hours. Ice was applied to the groin, and the patient kept strictly in the recumbent position. Evening temperature 99°.

March 25th.—The patient appears better, having recovered to a considerable extent from the shock. The pulse is fuller and less rapid. There had been no further vomiting, and he had slept well after an injection of morphia. Temperature, morning, 99·2°; evening, 99·2°; last night, 101°.

27th.—There is some redness about the extravasated blood in the left groin. Temperature 100·4°.

April 1st.—He still complains of great pain across the lumbar region, and after the action of the bowels, produced by an enema, this was worse. The urine, which has had to be drawn off regularly, is to-day offensive, and there is evidence of cystitis. A bedsore has formed over the right buttock. The temperature has continued high since March 27th, averaging about 100·2°, but to-day rising at 4 P.M. to 103°.

10th.—Feeling better and in less pain. The bedsore is healing, and the bowels act well. The bladder has been washed out daily since the 1st with dilute solution of Condy's fluid, and the urine is less offensive (sp. gr. 1025). The temperature, which has been higher during the last few days, rose to 104° in the evening.

The patient died on the 28th. He had been getting weaker for some days. Lately there had been subsultus tendinum, and much sweating. The cystitis had improved, but the left leg had been swollen and painful for a fortnight, and latterly extremely swollen and œdematous, with a good deal of pain. There had been swelling of the right leg for about a week. One spot on the sacrum, above a deep bedsore which had formed, was very tender to the touch. He had no rigor until the day of death, when at 8 P.M. there was one lasting several minutes, after which he passed into a drowsy condition. Later there was a slight attack of shivering, during which the temperature rose to 103·4°. During the last few days of life the temperature was generally high, especially in the evening, when it usually exceeded the morning by two degrees; but on the 16th it had fallen to 95°, and was less regular for a day or two. He had emaciated greatly.

At the post-mortem examination, which was made by Dr. Sharkey on the following day, the body was that of a very fat man. Considerable decomposition had set in. The left leg was swollen and œdematous, the right leg only slightly so. The layers of the right pleura were firmly adherent; both lungs were congested and œdematous. Heart very soft and pale; microscopical examination of the fibres showed considerable brown atrophy. The liver was markedly fatty. Spleen large and soft. Brain, kidneys, and intestines all healthy. The bladder contained purulent urine, and the walls were congested and inflamed. Both femoral veins contained ante-mortem partially decolourised clots, which were only very loosely adherent to the walls of the vessels. The tissues of the abdominal wall, especially the subperitoneal connective tissue, of the pelvis was pigmented deeply black by former hæmorrhages, but no inflammation was present, except just about the site of fracture, which appeared to involve the third sacral vertebra, which was comminuted. Very slight traces of inflammation were found in the neighbourhood.

Remarks.—Fracture of the sacrum, requiring great force to produce it, is usually accompanied by fracture of the other bones entering into the formation of the pelvis, or by injury of the contained viscera; and proves almost invariably fatal. It follows from this mode of causation that fractures of this bone are usually compound; and there is no more common cause than gunshot. The result of gunshot fractures is well shown by the statistics published after the American war of the Rebellion. Of 145 fractures of this bone alone, the result was undetermined in 3; of the remainder, including all degrees of severity, 43·7 per cent. died. Among the recoveries were 8 out of 9 cases in which the rectum had been wounded, and 4 in which the bladder had been injured. In some the injury has been accompanied by considerable pain during defecation, and it has been difficult to keep the fragments in position. No such difficulty was experienced in the present instance, and the amount of pain suffered by the patient was comparatively slight. We do not think that thrombosis of the femoral veins has been previously noticed in such cases, but the affection being on both sides would suggest some possible extension of inflammation from the immediate neighbourhood of the fracture, though few traces of inflammation were found post mortem. Against this view, however, is the fact that the left leg had been swollen for a week before any swelling appeared in the right; and a more probable explanation would be that this was an accidental complication following the contusion to the left groin, marks of which were evident for some time after admission.

CUMBERLAND INFIRMARY.

PELVIC ABSCESS, WITH GENERAL PERITONITIS, CAUSING INTESTINAL OBSTRUCTION; ENTEROTOMY; DEATH SEVEN MONTHS AFTER THE OPERATION; NECROPSY.

(Under the care of Dr. BARNES and Dr. MACLAREN.)

For the following notes we are indebted to Mr. Charles A. Morton, late house-surgeon.

H. T——, aged twenty-one, was admitted on June 19th, 1885. The illness began on Jan. 6th with burning pain in the epigastrium and vomiting. The vomiting has continued until to-day and has been very frequent. Now the pain is not limited to the epigastrium, but is felt over the whole abdomen. There was no severe pain in the cæcal region at the beginning of her illness. During the first week the bowels were open regularly, but there was no action from Jan. 12th to Jan. 18th, when they were opened after an enema, and on the 19th they were opened twice without an injection. Between the 6th and 12th enemata were used without success. Three weeks ago she vomited frequently for some hours, but did not suffer from abdominal pain.

On admission the abdomen was somewhat distended; tympanitic, except in the region of the cæcum and ascending colon, where there was dulness; no tenderness; no swelling discovered; nothing felt per rectum; rectum empty; a few petechial spots on the abdomen; pulse feeble: anxious expression of the face. The bowels were open in the evening; motion liquid.

Jan. 20th.—Abdomen more distended, with less dulness in cæcal region; there has not been any vomiting. The bowels have not been again opened, though she has had several injections. One grain of opium ordered every four hours.

21st.—Abdomen more distended, with increased dulness in the region of the cæcum and ascending colon. No vomiting, and no action of the bowels. Pulse rapid and weak.

22nd.—No marked change, but slight abdominal tenderness was present.

23rd.—Abdomen greatly distended; great prostration. Per rectum, a large, hard, tender mass is felt on the right side of the bowels some little distance from the anus. Under ether an aspirator needle was inserted into the cæcal region line. No fæcal matter was withdrawn. On attempting to puncture the rectal swelling from the rectum, it burst, and nearly an ounce of pus came away.

24th.—The patient not relieved; fæcal vomiting and great prostration. Under ether an incision was made in the cæcal region into the peritoneum. The bowel which presented (small intestine) was much inflamed, and pus and lymph came out of the cavity of the peritoneum. The bowel (which contained valvulæ conniventes) was stitched to the wound and then freely opened. A very large quantity of liquid fæcal matter escaped. An incision was made from the vagina into the peritoneal cavity for drainage here. The bleeding necessitated plugging the vagina.

25th.—She is a little stronger; pulse still very rapid (140) and weak. Free discharge from the wound. No vomiting, but no action of bowels. Abdomen a little distended again since the operation, and very tender.

28th.—There has been no vomiting since the operation, and the bowels have acted freely through the wound. She is decidedly stronger, and has not any abdominal pain. Still takes one grain of opium every three hours. On the previous day (Jan. 27th) a large tube was introduced into the abscess cavity through the rectum. A little fæcal matter now comes from the rectum.

Feb. 4th.—The tube came out of the rectal opening. Some

swelling still felt from the rectum. Has greatly improved in the last few days. Wound discharges fæcal matter freely. She is quite free from pain and abdominal tenderness.

5th.—Bowels acted once or twice per rectum; watery motions, with a little solid matter in them. The rectal swelling slowly subsided, and fæces were discharged from the artificial anus and from the rectum.

The patient's strength gradually returned, and towards the end of March she was able to sit up. But on the 29th she had a rigor with high temperature, and again on the 30th, and vomiting with slight abdominal pain again set in. These symptoms did not continue, but were followed by a recurrence of rectal swelling, close to the place where the former abscess burst. This swelling increased slowly; emaciation became very great; she would hardly take any food; her strength gradually failed, and she died on Aug. 18th. After March she had no recurrence of the abdominal symptoms.

Post-mortem examination.—The artificial anus was about two feet from the ileo-cæcal valve; the intestine below was comparatively empty and much contracted. Beneath the cæcum, in the right side of the pelvis, was an abscess cavity of about the size of a duck's egg. It was situated behind and to the right side of the uterus. The right ovary was lost in the thickened tissue which formed the abscess wall. The cæcum was adherent to it above, and the rectum and omentum were adherent to the uterus. The left ovary was so firmly adherent to the surrounding parts that it could not be recognised as an ovary. The vermiform appendix was adherent to the abscess wall beneath the cæcum; here the end had not been perforated. The uterus was normal.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Remarkable Parietal Coagulum in Heart.—Recent Hæmorrhage into Spinal Cord.—Cysts in Reproductive Organs of Animals.—Fatty and Cirrhotic Liver.—Contracted Fingers.—Gummata of Liver in Child.—Iridescent Calculi.

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair.

Dr. BRISTOWE showed a Heart whose ventricles were lined by laminated clot. The specimen was taken from a man aged forty-four, who had suffered for two months from severe pain about the trunk. At the necropsy cancer of the stomach was found, though unsuspected during life. The ventricles of the heart were lined with an old coagulum entangled amongst the meshes of the columnæ carneæ; the free surface was only slightly rough and looked smooth; the columnæ and papillares were thoroughly concealed.

Dr. W. C. CHAFFEY showed microscopic specimens of Hæmorrhage into the Grey Matter of the Spinal Cord. The patient was a female child, aged four years, whose illness began with vomiting one day after a fall. Paraplegia, disturbance of micturition, gurgling in the throat, some weakness of the intercostals and left arm, retraction of head, difficulty in sitting up, ineffectual cough, no loss of sensory functions, and loss of reflex phenomena in the legs, without convulsions were the main symptoms. The patient died nine days after the fall, and eight after the commencement of the symptoms. The spinal cord was swollen in the lumbar enlargement. Extensive hæmorrhages were found in the lumbar and cervical swellings of the cord, occupying accurately the grey matter of the anterior cornua. The nuclei of origin of the nerves in the medulla oblongata were affected.

Mr. BLAND SUTTON read a paper on Ovarian and other Cysts. The main object of this communication was to show that ovarian cysts—that is, those cysts which arise in the parenchyma of the ovary—originate in the corpora lutea. The material especially used consisted of the uterus and its appendages furnished by seventy cows, of all ages and conditions; fifty pigs; twenty mares, in addition to the fifty reported upon; and the varied material obtained at the Zoological Gardens. The specimens of ovaries exhibited were selected so as to show all the stages in the formation of the cysts, from the ordinary corpus luteum to cysts as large as Tangerine oranges. The mode of formation of the cysts in these cases admits of no doubt, for the only instrument needed in the investigation was a sharp knife. The peculiar yellow colour of the material composing these curious bodies renders the identification indisputable. The various conditions are best traced in cows, in which ovarian cysts occur with tolerable frequency. Multilocular cysts are the result of the concomitant growth of two or more cysts in the same ovary. This was by no means a rare event. The same process could be traced in the ovary of the sow, in asses, in mares, in a tiger, and in monkeys. Specimens of cysts arising in this way may also be seen in the ovary of the human female. The question next arose, If these cysts begin in the corpora lutea of pregnancy and of menstruation, how are they to be accounted for in the ovaries of the child and even the fœtus? Waldeyer and Biegel have both insisted that the ovaries do not remain idle in early life, but that many of the follicles ripen, atrophy, and form a sort of corpus luteum even in the fœtus. This is no abstract statement. Doran's "find" of an incipient papillary cyst in the tissue of the hilum stimulated Mr. Bland Sutton to examine fœtal ovaries. To his astonishment, he found ovarian cysts very frequently in the human fœtus, and three typical specimens were shown. In one specimen in particular ova could be seen in the follicles exactly as in an ovary after puberty, but of course much smaller. These observations went to show that in the fœtus, child, or mature female, cysts might arise in the corpora lutea. Whilst working at the fœtal human ovaries Mr. Sutton had good reason to endorse the view that the cysts arising in the "hilum of the ovary" take origin in the remains of the Wolffian body; on one occasion he was able to make out an almost complete longitudinal section of a Wolffian tubule, and in one specimen the true tissue of the ovary was scarcely represented, but it seemed to be made up almost entirely of Wolffian remains. The remaining specimens were exhibited to demonstrate the following points:—(1) A cow's uterus and vagina showing large cysts in the vaginal wall developed in the lower (posterior) end of Gartner's duct. The ducts of Gartner and Skene's tubes are one and the same structure; the glands described by some as independent structures are only diverticula from the ducts, and are homologous with the vesiculæ seminales of the male. Broad ligament cysts unconnected with the parovarium in mares, cows, pigs, and kangaroos were shown, and also examples of hydrosalpinx in pigs and in the cow. This condition seems not to be infrequent, and is a cause of sterility in these animals.—Mr. ALBAN DORAN was glad to find that Mr. Sutton confirmed him in maintaining that ovarian cysts might arise from the parenchyma, for he was not prepared to admit that it was proper to speak of corpora lutea; he preferred to call them follicles that had undergone involution, without any necessary connexion with impregnation, menstruation, or rut. It was necessary to distinguish, as Dr. Klein had done in his Handbook, between the tissue of the hilum and the parenchyma of the ovary. The former is the blastema which has been found to develop in the embryo around the upper part of the Wolffian body. The dilated lymphatics observed by Mr. Sutton corresponded to the "kystes lacuneux" of Verneuil, which formed conspicuous but ill-defined cysts in the broad ligament in cases of myoma of the uterus. To decide the true position of the orifice of Gartner's duct it was necessary to make sure where the vagina ended and the vestibule began in different species of animals. Owing to differences in the development of the lower part of the united Müller's ducts, the true vagina was sometimes very long, in others was almost replaced by the vestibule.—Dr. KINGSTON FOWLER said that he had seen in a human ovary a cyst originating in a corpus luteum.—Dr. W. B. HADDEN said that he had seen many pediculated cysts attached to the broad ligament. Were they fœtal remnants or parovarian?—Mr. BLAND SUTTON said that Dr. Hadden's specimens were examples of dilated tubules of the parovarium that had become free. A pair of unaided eyes and a sharp knife were all that was necessary to recognise the facts which he had recorded.

Dr. HALE WHITE showed a specimen of a Liver divided into two parts by a constricting band, one part being fatty the other cirrhotic. The liver was removed from a man who died with large white kidneys. Stretching across the upper surface of the liver was a deep fissure, which began behind at the attachment of the posterior part of the suspensory ligament, and ran along the upper surface at the attachment

of that ligament for about two-thirds of its extent, then it bent to the right and terminated at the anterior border of the liver, cutting off thus a small piece of the right lobe. The part of the liver to the right of this band was fatty, and that to the left cirrhotic; the former very quickly underwent decomposition and passed into the sponge-like condition so often seen in decomposition of the liver, the latter did not decompose nearly so quickly. The microscope confirmed these statements, and the sponge-like appearance was clearly seen not to be due to vacuolation but to decomposition. The constricting band was probably owing to the patient wearing a belt. Although it was not at all in the usual position, still it was extremely improbable that it could be due either to disease or congenital malformation. From its position and from the fact that the small piece of the right lobe which was nipped off by it was cirrhotic, it was certain that the cirrhotic condition of the left lobe as contrasted with the fatty condition of the right was due to the constriction. This view was confirmed by the fact that the vessels to the left lobe would have been pressed upon, whilst those to the main part of the right would not, considering the position of the constriction.—Dr. KINGSTON FOWLER said similar appearances could be found in livers deformed by tight lacing.—In reply to Dr. N. Moore, Dr. HALE WHITE said that the majority of the cases of vacuolated livers were of post-mortem origin.

Mr. C. B. LOCKWOOD showed some Casts and Dissected Specimens of Contracted Fingers. He said dissected specimens were rare. In the first specimen there was contraction of the little finger; here the transverse bands were shortened. In another instance the joints and neighbouring tissues were loaded with urate of soda, which, he thought, might be regarded as a cause of the contraction in this case. The specimen put up in spirit had lost by solution almost the whole of the urate of soda. In another specimen the middle phalanx was dislocated on the head of the proximal phalanx. The extensor tendon was encrusted with urate of soda. In an example of Dupuytren's contraction there was a band of thickened palmar fascia, but no urate of soda could be found anywhere; mechanical labour would probably erroneously be assigned as the cause of this.—Dr. W. M. ORD had investigated many gouty kidneys and many gouty joints. The needles of urate of soda were seen in the cartilage, and there was usually no proliferation of cells. He had seen, as Charcot pictured, urates in the tubules and in the substance of the kidney. He considered that the tissues were more tolerant of urates than was generally supposed.—Dr. N. MOORE said that the plantar fasciæ, and that in front of the neck, were frequently infiltrated with urates in gouty subjects. In his opinion, degeneration of cartilage was present, and preceded the deposit of urates.—Mr. BLACK had seen a deposit of crystalline urates in the carpal bones of a spirit specimen.—Mr. W. ADAMS said that the dissection of the specimen of Dupuytren's contraction was a good example of pure fascial contraction.—Mr. SUTTON said that cholesterine often looked like crystals of urate of soda, and suggested that this might be the explanation of Mr. Black's carpal specimen.

Dr. NORMAN MOORE showed a specimen of Gummata in the Liver of a boy aged nine. The boy had been under Dr. Gee's care in St. Bartholomew's from December, 1883, to September, 1885, with enlarged liver and ascites. The liver and spleen could both be felt during life. The boy had well-marked Hutchinsonian teeth, but no other signs of syphilis, except a sallow skin and extreme cachexia. The liver, kidneys, stomach, intestines, and spleen were all found to show well-marked amyloid change. The liver was very irregular on the surface, and had deep puckered scars in several places. In its substance were several large, yellowish, tough masses of irregular outline, and each surrounded by a red zone of engorged liver substance. Microscopic sections showed these masses to be large gummata, and in their neighbourhood and here and there on the surface were minute collections of embryonic connective tissue cells. Very few cases of gummata in the liver due to congenital syphilis have been recorded, but these were certainly of that nature.

Mr. S. G. SHATTOCK read a paper on Iridescence in Calculi. He showed a group of fifty calculi of most varied form, and having sharp facets. The largest was two centimetres in its greatest measurement, the smallest about the size of a hempseed. A remarkable iridescent, lustrous, yellow colour was evident in all. This property was confined to a distinct separable surface layer. The inner substance was phosphatic and composed of conical intersecting tufts of fine acicular crystals. The calculi were removed from the prostate of a man on July 20th, 1843. Phosphate of lime and magnesia and ammonio-phosphate of magnesia formed, with carbonate of lime, the chief chemical constituents. A laminated nucleus was found in the centre. Renal and vesical calculi, pseudo-metallic in appearance, had been described in herbivora; these consisted of carbonate of lime. They were very rare in man. The only one he knew of was in University College museum, and was given to the late Mr. Liston by Civiale. Thin sections of the prostatic calculi showed two kinds of structure. The iridescent thin layer was composed of a large number of closely apposed homogeneous concentric lamellæ, of great tenuity and translucent. All the calculi examined had a distinct, compact, pale-brown, spherical, laminated nucleus. These were evidently identical with minute prostatic calculi. The porcellanous appearance of certain prostatic calculi was due to a similar disposition of the superficial lamellæ, which, however, were less regularly arranged; phosphate of lime with a small proportion of carbonate formed the bulk of the porcellanous surface. He remarked that all the calculi were made up of phosphate and carbonate of lime, combined with a colloidal base. The colloidal base in this case had been found by Dr. Bernays. Mr. Shattock suggested that in all cases in which iridescent calculi were formed the urine contained albumen, though not necessarily albumen from the kidney. In support of this he referred to a case of iridescent calculi shown to the Society last year by Mr. Bilton Pollard, where the calculus was contained in the pelvis, and the urine contained pus. Dr. W. H. Stone had examined the iridescent calculi shown, and had found that the iridescence was a phenomenon of diffraction.—Dr. W. M. ORD did not regard the iridescence as due to diffraction, but to the same class of phenomena as Newton's rings. A typical colloid was the organic basis of such calculi, and the importance of carbonate of lime was great. In the ordinary pearl we had both these elements at work. These calculi must have been formed very slowly.

The following specimens were shown:—Dr. Gulliver: Hæmorrhage into Suprarenal Body. Dr. Hale White: (1) Melanotic Scirrhus of Liver; (2) Hæmorrhage into Long Bones in case of Purpura Hæmorrhagica. Dr. Beavan Rake (per Dr. Hale White): (1) Hand and Larynx from a case of Mixed Tubercular and Anæsthetic Leprosy; (2) Hand from an old case of Anæsthetic Leprosy, showing spontaneous amputation and arrest of the disease; (3) Extreme Ulceration of the Larynx, with perforation, from a case of Anæsthetic Leprosy; (4) Thickened Median Nerve from a case of Anæsthetic Leprosy. Mr. Hurry Fenwick: Miliary Tubercle of Bladder. Mr. Herbert Larder: Cancer of Œsophagus. Dr. Percy Kidd: Tuberculosis of Uterus and Fallopian Tube. Dr. W. B. Hadden: Ulcerative Endocarditis of Right Side (two cases). Mr. D'Arcy Power: Intraosseous or Central Necrosis of Femur.

CLINICAL SOCIETY OF LONDON.

Idiopathic Purulent Peritonitis in a Child.—Ligature of External Iliac Artery.—A Case of Nitric Acid Poisoning.

AN ordinary meeting of this Society was held on the 13th inst., Mr. Thomas Bryant, F.R.C.S., President, in the chair. A splendid array of living specimens was a welcome feature of the meeting.

Dr. SAMUEL WEST read a paper on a case of Idiopathic Purulent Peritonitis in a child. Julia S——, aged ten, after a wetting, was suddenly seized with intense abdominal pain. There was no rigor, but vomiting was severe. The pain and vomiting continued severe till her admission to hospital four days later. The bowels had not acted since the commencement of her illness. There was no personal or family history of importance. The physical signs were all abdominal—great distension, pain, and tenderness. No tumour was felt, but there was thought to be a little dulness in both flanks. Skin hot and dry, but temperature only 99·8°; pulse 100; respiration 28. Vomit frequent, yellow, acid, but not fæcal. Poultices and opium were ordered. The symptoms continued to be unrelieved, and the bowels still unmoved. On examination per rectum, a baggy swelling of indefinite nature was felt high up in the pelvis. The condition of the patient becoming worse, and all the symptoms being unrelieved,

the abdomen was opened by a mesial incision. Pus was found, chiefly in the lower part, and evacuated. The cavity was washed out, and drainage-tubes inserted. The child died about six hours later. The necropsy revealed acute suppurative peritonitis, but no cause for it could be found; the whole of the intestines, abdominal glands, and organs were perfectly healthy. The case was therefore one of idiopathic purulent peritonitis. Such cases are rare. Dr. West and also Dr. Goodhart mention only one case each similar to the present. Acute idiopathic peritonitis was first described by Duparcque in 1842, subsequently by Ganderon, but most completely by Rehm in Gerhardt's "Kinder Krankheiten." Dr. Hilton Fagge refers to the extreme rarity of these cases, and had met with only two such cases in an extensive experience of twenty years. The case presented great difficulties from its resemblance to some form of intestinal strangulation, but of this there was no clear evidence. Nor was there any history which pointed to perforation as the cause of the peritonitis. Whatever the peritonitis might be due to, it was almost certainly suppurative, and this diagnosis carried with it the appropriate treatment—viz., evacuation. The low temperature throughout added to the difficulty of the diagnosis, but other cases were quoted of acute internal suppuration with low temperature, to which Dr. Hilton Fagge has also referred.—Mr. MORRANT BAKER related a similar case. A lad, fifteen years old, was admitted in a moribund condition into St. Bartholomew's Hospital. There were vomiting, constipation, tympanites, and low temperature. An incision was made into the peritoneum, and a quantity of foul pus welled up through the wound. The cavity was washed out with a solution of Condy's fluid, and a drainage-tube left in. The patient died in five hours. The necropsy merely showed the signs of an intense peritonitis without any obvious cause. As against mechanical obstruction of the intestines, he thought that the presence of fæces in the rectum was an important diagnostic point.—Dr. CHARLES WEST referred to acute peritonitis in the fœtus, in the new-born, in infants, and at that age at which Dr. Samuel West's case occurred. He had seen two cases of idiopathic purulent peritonitis in which the pus discharged through the umbilicus; one of these, at least, recovered. He thought some cases of acute purulent peritonitis were due to "cold." Obstinate constipation was not so marked a symptom of peritonitis as it was of intestinal obstruction.—Mr. HOWARD MARSH had observed that in instances of inflammation about the vermiform appendix the pain was sometimes wholly referred by the patient to the left instead of to the right flank. The temperature was often a faulty guide in diagnosis; he had seen cases of acute, even perforative peritonitis, in which no fever was present. In a case of laparotomy for intussusception in an infant, he had washed out the peritoneal cavity with a 1 per cent. solution of carbolic acid, and the next day signs of carbolic acid poisoning were present. A solution of permanganate of potash or a weak solution of iodine would probably be preferable.—Dr. W. B. HADDEN had made a necropsy on a case of idiopathic purulent peritonitis in a girl aged three. Two cases of disease, one of typhoid fever and another of obscure blood-poisoning, had occurred in the same house that the patient came from.—Dr. FREDERICK TAYLOR said it would be important to know, from a point of view of diagnosis, whether intestinal obstruction ever leads to pain in the right iliac fossa.—Mr. GOLDING BIRD thought that the pulse was the best guide in the diagnosis of peritonitis and not the temperature, which was not necessarily raised and might be subnormal. He referred to Hilton Fagge's teaching that in cancer of the descending colon the cæcum was the seat of pain on account of the distension of this portion of the bowel.—Mr. HENRY MORRIS said that in a case of strangulated umbilical hernia he had found fæcal matter in the rectum, and he thought the sign was not of diagnostic importance. He always taught at Middlesex Hospital that we should not look for a high temperature in peritonitis.—Mr. THOMAS BRYANT alluded to the remarkable discussion which Dr. West's paper had occasioned. With regard to the locality of pain, he believed it was of no moment as a diagnostic sign. Hilton Fagge had pointed out the severe pain in the right side in chronic obstruction and when complete obstruction set in suddenly. As a rule, in acute peritonitis the pain was central and about the umbilicus. He said that Dr. Addison used to aver that idiopathic peritonitis did not exist. Three cases pointing to this conclusion were narrated. The first was that of a woman who had a rectal ulcer; a suppurating gland in the pelvis was found as the cause of the fatal purulent peritonitis. The second case was that of a boy aged sixteen, in whom an umbilical fistula formed; at the necropsy the cicatrix of an ulcer was found in the cæcum. The third case was that of a girl aged six, in whom a history of mischief in the cæcum was obtained. The signs of semi-acute intestinal obstruction led to the performance of laparatomy; a retro-peritoneal abscess was opened and drained; the patient recovered completely. Mr. Bryant spoke in favour of iodine water as an antiseptic solution. A high temperature was not a general sign of peritonitis.

Mr. WALTER RIVINGTON read notes of two cases of Ligature of the External Iliac Artery for Femoral Aneurysm. Case 1 was that of a sailor, aged twenty-seven, who was admitted into the London Hospital under Mr. Reeves on September 10th, 1882, with a pulsating swelling in the right groin. Four weeks previously he first noticed a swelling of the size of a halfpenny. It enlarged gradually until two days before admission, when it increased rapidly and caused him considerable pain. On admission the tumour was the size of a cricket-ball, with marked bruit and pulsation. He had a sore on his prepuce and a suppurating bubo on that side, but there was no history of syphilis. An attack of facial erysipelas, some doubt as to the diagnosis, and a deceptive appearance of consolidation in the swelling caused delay in resorting to operative measures. He then came under Mr. Rivington's care, and a fortnight later, when an increase in the size of the swelling was perceptible, the external iliac artery was tied under thymol spray. Owing to the encroachment of the aneurysmal sac above Poupart's ligament, the artery was found to be displaced inwards to the inner side of the vein, and so deep that it was not exposed to view. Immediately after the catgut ligature was applied all pulsation and bruit ceased, and the tumour became soft and flaccid. The wound was closed and the limb wrapped in cotton-wool. The wound did not remain long aseptic. On the 27th some offensive discharge occurred, and lint soaked in carbolic oil was substituted for the gauze. The tumour had diminished considerably in size. The chief feature was a loss of sensation and motion in the parts supplied by the sciatic and anterior crural nerves. On November 5th there was a mild attack of erysipelas. The right leg was warm, but there was no sensation in it except occasional "pins and needles" and pains in the back of the thigh and knee. Galvanism was tried, without avail, beyond restoration of slight power over the rectus femoris. Return of pulsation was first noticed in the femoral artery on Nov. 29th. The wound had healed by Dec. 12th. Pressure sores existed over the trochanter and the heel. The tumour gradually decreased in size till March 2nd, when it was 4½ inches less in circumference than previous to the operation. The patient's condition otherwise was stationary. Suppuration ensued from the original wound, which reopened on March 27th. The clots in the sac broke down; secondary hæmorrhage took place on April 5th, 6th, and 9th. On the last occasion of the sac being opened, all clots were cleared out, but although no blood was lost during the operation the patient did not rally. The necropsy showed destruction of the external circumflex and commencement of the popliteal arteries where the aneurism had originated, and absence of anything like an aneurismal sac. The external iliac artery and vein were pervious. A slight mark across the artery where the ligature had been applied could be seen. The anterior crural nerve was embedded in inflammatory plastic matter for several inches. The sciatic nerve was normal. The author considered that the loss of sensation and motion was an extreme form of a recognised temporary effect of ligature of a large artery. The collateral circulation was established sufficiently to avert gangrene, but insufficiently to maintain the functional integrity of the more remote and delicate tissues like the terminations of sensory nerves and the motorial end plates in the muscles. The limb was on the verge of gangrene, its feeble vitality being shown by the sores over the trochanter and the heel. The case further illustrated the uncertain behaviour of the ordinary catgut ligature when used for ligaturing an artery in its continuity. Probably the catgut would have held longer if the wound had healed. Case 2 was that of a commission agent, aged fifty-one (formerly a soldier who had served in the Crimea and in the Indian mutiny), who was admitted into the London Hospital on July 10th, 1885, for a swelling at the upper part of his left thigh, which proved to be a fusiform aneurysm of

the common femoral underneath Poupart's ligament. The size of the aneurysm was about that of a hen's egg. He was treated by the author in 1879 for a left popliteal aneurysm, which was cured by Esmarch's bandage and digital compression. The case was reported in THE LANCET of Oct. 16th, 1880. The external iliac artery was tied under the carbolic spray with carbolised silk on the 3rd July by means of an incision three inches long, intermediate in position between Abernethy's and Astley Cooper's incisions. The artery was found easily. The patient made a good recovery, and was discharged cured on Sept. 22nd. The chief points of interest in the case were the circumstance that this was the second aneurysm which had developed on the main artery of the left lower limb, and the use of carbolised silk ligatures cut short and left in the wound.—Mr. GOLDING BIRD asked what the condition of the pulse was at the ankle. He had recently ligatured the left external iliac artery for aneurism of the profunda artery. The patient was suffering from septicæmia. The femoral artery was pushed so far inwards that it could be felt from the pubes down to its entry into Hunter's canal. The diagnosis was not made during life, but the displacement of the femoral artery inwards ought to prove of value in diagnosis. Astley Cooper's operation was performed without exposing the artery to view. Chinese silk twist was used. There was no sign of suppuration at the site of ligature. The patient died from the general disease, and not from the operation, which was surgically successful.—In reply to the President, Mr. RIVINGTON said that no digital or instrumental pressure had been used before operation. There was no pulse at the ankle. Abernethy's operation was performed.

Dr. DYCE DUCKWORTH read notes of a fatal case of Nitric Acid Poisoning. A city merchant, aged twenty-nine, was admitted to St. Bartholomew's Hospital on Feb. 11th, 1885, with the history of having swallowed about an ounce of strong nitric acid shortly before. He had been seen by a surgeon, and was found vomiting. Lime-water was given to him. He was supposed to have had his luncheon before he took the poison. Calcined magnesia in milk was given freely, and the vomit, previously acid, became alkaline. Opium was given per rectum, and linseed and opiate poultices were laid on the abdomen. The suffering was intense; retching and vomiting set in, and collapse followed. Nutrient enemata, with brandy and opium, were given. His cough was troublesome. The urine contained blood on two occasions, and albumen twice afterwards. Vomiting and retching persisted, and the pulse became very feeble. Shreds of putrid mucous membrane were ejected. The temperature rose on the fourth day to 102·2°. Diarrhœa set in, but no blood was passed. There was a suspicion of pericarditis. The patient nearly sank on two occasions, but was revived by nutrient enemata with brandy. On the fifth day he was so much better that his friends believed that he was recovering. He died 100 hours after taking the acid. On examination, there were signs of inflammation at the fauces, and down the œsophagus, stomach, duodenum, and as far as the jejunum. The stomach was contracted, but not perforated. There was some local peritonitis over the stomach and liver, but no general peritonitis. The pericardium was sticky. He took in all over an ounce of laudanum while under treatment. (The parts, preserved in glycerine, were shown; also drawings of the first four specimens of urine passed.) In reply to Dr. de Havilland Hall, Dr. Duckworth said he did not know why he should always resort to hypodermic injections of morphia when tincture of opium by the mouth would answer as well. Hypodermic injections were not free from danger.

The following living specimens were shown:—Mr. Clutton: (1) Cervical Spina Bifida undergoing Spontaneous Cure; (2) Tubercular Ulceration of Palate. Dr. Kingston Fowler: A case of Pseudo-Hypertrophic Paralysis in an adult male. Mr. Bernard Roth: An extreme case of Lateral Curvature of the Spine. Dr. Radcliffe Crooker: (1) A case of General Discolouration; (2) A case of Arsenical Pigmentation. Dr. Colcott Fox: Two cases of Pigmentary Disorder. Dr. Herringham: A case of Chronic Parotitis in a middle-aged woman. Mr. Walsham: A case of Acute Spreading Obliterative Arteritis. Mr. J. H. Morgan: (1) A case of Gastrostomy in a boy; (2) An unusual form of Sacral Spinal Bifida. Dr. Charlewood Turner: A case of Congenital Cyanosis with Pulmonary Stenosis and Pre-diastolic Bruit. Mr. Keetley: (1) A case of Modified Symes's Amputation; A case of Modified Gritti's Amputation.

MEDICAL SOCIETY OF LONDON.

Microscopic Specimens of Bromide of Potassium.—Central Necrosis in Children.

AN ordinary meeting of this Society was held on Monday last, Dr. Douglas Powell, Vice-President, in the chair.

Dr. COLCOTT FOX read a paper on an investigation, conducted by himself and Dr. Heneage Gibbes, into the Morbid Anatomy of the Eruption produced by Bromide of Potassium. The case examined was that of a child aged eight months, who was ordered on June 2nd one grain of bromide and one grain of iodide of potassium every six hours. Two days later the doses were given every four hours. The eruptions appeared on the sixth day. The earliest eruptions were inflammatory papules, the size of a pin's head to a split-pea. These passed on to vesicles with solid inflammatory base, and vesicles without any solid base, and one bulla. Altogether, the eruption looked like varicella. Many of the papules and vesicles became confluent, and had the appearance of infiltrated discs. The eruption was bilateral, and not very symmetrical. The evolution of the rash continued after the withdrawal of the drug. The disease did not extend beyond the cutis vera. The chief points were the involvement of the bloodvessels and the sweat glands. The successive stages of the disease were described; it began in inflammatory foci, which went through various changes to the formation of microscopic abscesses. In none of the sections was the rete Malpighii stripped off the cutis. In the neighbourhood of the pustules the small arteries were in places blocked with coagula; the vessels were much dilated, and this was most marked in the neighbourhood of the pustules; the superficial and deep lymphatics were slightly affected. The sweat glands showed the various stages of inflammation from normal structure to absolute destruction, so that the tubal form was seen to be lost in places. As a rule, the sebaceous glands did not show any changes. Some small processes budding forth from the outer root sheath of the hair follicle were all that was noticed in these structures. The authors concluded that the poisonous agent acted chiefly through and on the bloodvessels and sweat glands. The sebaceous glands and hair follicles had not taken an initial part in the process, and so they did not agree with Professor Neumann or Dr. Stephen Mackenzie. These structures were affected purely accidentally, and had no causal relation to the disease. As to Dr. Mackenzie's superficial vesicles in the epidermis, they had found none. They considered that sections should be made in the tissues of the skin to a much greater depth than was usually done. Even extensive diffuse inflammatory changes might possibly be found in the viscera. Bromine was known to be eliminated very slowly. It had been detected by Wood and others even a few weeks after its administration had ceased. It was eliminated by the kidneys, in the saliva, and in the perspiration, and was to be found always in the fæces. Dr. Fox believed that we were coming round to the view that even the iodide of potassium eruptions were not of sebaceous glandular origin.—Dr. DOUGLAS POWELL pointed out that the paper was illustrated by beautiful microscopical specimens and accurate microphotographs.—Dr. RADCLIFFE CROCKER had seen two cases of the disease at the site of the vaccine scars. In most of the cases the combined administration of the iodide and bromide had been recorded; this was possibly a favouring influence. The eruptions sometimes did not appear till long after the drug had been administered. Probably defective elimination was the cause; in some cases disorganisation of the kidneys was noted. Sometimes in syphilis, on withdrawing the iodide, a rash appeared. Iodide was diuretic, and he suggested that the loss of the diuretic action allowed the remaining iodide to cause the eruption. The main brunt of the disease was on the vessels, as Drs. Fox and Gibbes had shown. He did not think there was any essential difference between the iodide and bromide rashes.—Dr. STOWERS related a case, and showed a drawing of a case of bromide of potassium eruption in an infant nine months old.—Dr. COLCOTT FOX, in reply, said that many authors had noticed the circumstance that the bromide rash disappeared when the medicine was persevered in; but he could not explain the fact.

Mr. CLINTON DENT and Mr. W. C. BULL read a conjoint paper on Central Necrosis in children. There was necrosis

of the cancellous tissue at the end of the shaft, with slight changes in the compact tissue, but the periosteum was not necessarily involved. The disease frequently affected the upper end of the ulna and the lower end of the radius, but it might occur in any long bone. He had seen a good specimen of it in the head of the femur. A remarkable point was its frequent symmetry. The age at which it occurred was two to five years generally. Sometimes the disease was first seen after it had lasted a long time. He had been unable to make out any cause for it. There was frequently no pain; sometimes an abscess or enlargement of the bone was the first sign. The disease might last many months or even years. It might be mistaken, he thought, for the "osteal cachexia" of Gee. Sometimes there was some effusion into the joint in the early stage; the neighbouring lymphatic gland was generally enlarged. The travelling of the sequestrum was a noteworthy feature. There seemed to be a natural attempt to expel the sequestrum in the direction of least resistance. A remarkable illustration of this was to be seen in the Musée Dupuytren; here the sequestrum travelled downwards and penetrated the head of the tibia, which was dislocated backwards. The treatment was simple and satisfactory, if the joint be not involved; but the cases frequently did not come under notice till the joint was diseased. In diagnosis the employment of the exploring needle was important. Removal of the sequestrum was not difficult.—Mr. W. ADAMS remarked that subacute inflammations in cancellous bone in any situation, as in the vertebræ, might give rise to central necrosis. Sir Benjamin Brodie used to trephine when the head of the tibia was the seat of the sequestrum.—Mr. J. H. MORGAN agreed with Mr. Dent that a reform in the nomenclature of bone disease was much to be desired. He thought that the disease might be better described as epiphysial necrosis. He believed that such an inflammatory necrosis was a not unfrequent cause of arthritic disease. In his opinion the disease was rarely symmetrical.—Mr. WALTER PYE did not think that half the cases of joint disease were due to this "epiphysial" disease. In his experience the disease was not symmetrical.—Dr. ANGEL MONEY said the growing end of the shaft of the bone was the seat of the disease and not the epiphysis; so he objected to the term epiphysial disease. He thought there was some analogy between the syphilitic osteal disease in infants and the affection in question. Syphilis might be operative in some of the cases.—Mr. WARRINGTON HAWARD said the disease was not rare. He did not regard it as the same as the syphilitic disease. The children were otherwise perfectly healthy. The term epiphysial, he agreed, was not a good one. The tendency for the sequestrum to make its way towards the surface was interesting and remarkable.—Mr. ROYES BELL related a case where the right tibia was affected first and then the left.—In reply, Mr. DENT said that he had not referred to necrosis of the vertebra because he had wished to insist on the symmetry of the disease. He thought the disease in Sir B. Brodie's cases was essentially different. He had not said that the disease was rare, though specimens were. He could not agree that the disease was due to epiphysial necrosis, nor to the acute infantile arthritis of Mr. T. Smith.

OBSTETRICAL SOCIETY OF LONDON.

Pelvic Dermoid Cysts.—Obstructed Labour.

A MEETING of this Society was held on Wednesday, the 4th inst., D. J. B. Potter, President, in the chair.

The following specimens were shown:—Dr. Lewers: (1) Unusually Large Vein in Wall of Uterus. (2) Malignant Disease of Sigmoid Flexure Invading Uterus. Dr. W. S. A. Griffith: Broad Ligament Cyst with Septa in its Interior. Dr. Herman: Drawing of Chancre on Cervix Uteri.

Dr. HERMAN read a paper on the Suppuration and Discharge of Pelvic Dermoid Cysts. The author said that, while under ordinary conditions pelvic dermoid cysts were best treated by laparotomy, when such a cyst had suppurated and burst into one of the pelvic mucous tracts, there would usually be extensive pelvic adhesions, making the operation for the removal of such a cyst more than commonly difficult and dangerous; and, on the other hand, the suppurative process offered some prospect of cure without extirpation. The object of the paper was to assist in the treatment of these cases by offering as complete an answer as could be given to the following questions. 1. When a pelvic dermoid cyst suppurates and bursts, what may be the course of such a case? 2. What prospect of cure does this event offer? 3. Is this cure complete? 4. How can the cure be best promoted by treatment? It was commonly believed that so long as any part of the lining of a dermoid cyst remained the cavity would not close. He thought there were sufficient cases to show that either this did not always hold good, or that suppuration usually so altered the character of the lining membrane as to make it capable of contracting and closing. The author had had under his own care three cases in which dermoid cysts had suppurated, in two of them bursting into the vagina, in one into the bladder. He had collected from various sources a large number of other cases; and from examination of them he drew the following practical conclusions. 1. The suppuration of a dermoid cyst is sometimes a favourable event, leading to its cure. 2. This is especially likely to be the result if the cyst be small and unilocular, and if it have opened into the vagina. 3. An originally very small cyst may, when it suppurates, rapidly attain a very large size. 4. When the cyst is small, it may become inverted through the aperture of discharge, become polypoid, and be spontaneously expelled or easily removed by the surgeon. 5. This process may be imitated by the surgeon, but it is not safe unless it can be very easily done. 6. When a suppurated dermoid cyst has been emptied, it contracts, and its cavity either becomes obliterated or remains as a small sinus, which causes no trouble. 7. The first indication in the treatment of a cyst which has burst is to empty it, for cure by suppuration depends upon the cyst being emptied. 8. The opening of the cyst should be enlarged as much as can be safely done, the cavity explored, and its solid contents removed as completely as may be possible without violence to the integrity of its wall. 9. If the cyst have discharged into the bladder, its cavity should be reached by vaginal cystotomy, not by dilatation of the urethra. 10. If the cyst be multilocular, or if, after having been emptied as thoroughly as possible, it does not rapidly contract (from which it may be inferred that it has not been completely emptied), it is likely that it will discharge indefinitely, and exhaust the patient's strength; and therefore it should be removed by abdominal section without long delay.—Mr. KNOWSLEY THORNTON said he would refer to a few points only. First, as to cysts which opened into the bladder, the evidence must be very clear that they were ovarian, for dermoid cysts occurred in the utero-vesical cellular tissue. Secondly, unilocular dermoid cysts were very rare; most dermoid cysts were multilocular, or associated with ordinary multilocular ovarian tumours. Thirdly, the pathology of dermoid cysts was against cure by suppuration, though it might happen from the violence of the putrid inflammation entirely destroying the skin, &c., lining the cyst. Unless the lining membrane were entirely removed or destroyed they did not heal. The fact that they were occasionally malignant was against attempting a cure by incision and drainage. He had treated a case in which the tumour burst into the bladder. He attempted to remove it by abdominal section, but found it impossible. He then had recourse to drainage; but after many weeks the patient died exhausted by the discharge. He thought abdominal section was the better treatment, where possible, than lingering suppuration. With regard to the side issue of cystotomy *versus* rapid dilatation of the urethra, he entirely agreed with Dr. Herman.—Mr. ALBAN DORAN said that many dermoid cysts of the abdomen which had been described as non-ovarian were really ovarian cysts which had become separated from their pedicles. Pelvic dermoid cysts were undoubtedly non-ovarian in some cases. Dr. BRAXTON HICKS thought that many of these dermoid cysts were of the nature of the tumours called "fœtus in fœtu." In one case which he tapped, six weeks after, he attempted removal, but found it impossible.—Dr. ROUTH thought most of them were in reality fœtus in fœtu. If a whole fœtus might be enclosed, a portion might be. So far as he knew, no cyst containing teeth could have other than an ovarian origin.—Dr. PLAYFAIR rose to endorse what had been said by Dr. Herman as to the advisability of not attempting to operate through a dilated urethra. Rapid dilatation of the urethra was very far from being as simple and safe as it was generally considered to be. His results from vaginal cystotomy had been so satisfactory, that he was quite disposed to agree with Dr. Herman that in the class of cases he referred to it was likely to be preferable to urethral dilatation.—Dr. GALABIN thought that Mr. Doran's views, if confirmed

might throw light on the mode of origin of these growths. Dermoid cysts due to inversion of epidermis only produced hair and fat. Growths due to attachment of one ovum to another were generally found at some external part. Cysts producing teeth or bones were hardly ever found where they could not be derived from the ovary. If it happened that a liberated unimpregnated ovum became implanted on the peritoneum and there grew, this explained why such growths were found in the pelvis and not at other parts. He was strongly of opinion that vaginal cystotomy was far preferable to dilatation of the urethra for the removal of any growth. He had been struck with the facility of the operation, the rapid recovery of the patient, and the ready closure of the opening.—Dr. HERMAN said that although many dermoid cysts were multilocular, cases given in his paper showed that some were unilocular and might be emptied. He agreed with Mr. Thornton that intentionally to treat a dermoid cyst by incision was not good practice, but his paper dealt with cysts that had already burst or could not be distinguished from abscesses. The case mentioned by Mr. Thornton, in which he had been unable to remove a suppurated cyst, showed the utility of considering the questions raised in the paper.

Mr. S. D. HINE (Ilminster) read a paper on a case of Obstructed Labour, in which spontaneous version followed an unsuccessful attempt to deliver by the crotchet after perforation. The patient had been in labour thirty hours; liquor amnii escaped twenty-one hours. The cord was prolapsed; the head presented in first position; os uteri dilated; uterus in state of tonic contraction; conjugate diameter of brim under three inches; head immovable above it. After ineffectual attempts to deliver with forceps, the skull was perforated, and for about an hour endeavours were made to deliver with the crochet, but in vain. A consultation was then held, which lasted about ten minutes, and on examination at the end of this time the head presentation was found changed into a breech. A foot was then brought down, and the child thus delivered.—Dr. ROBERTSON asked why turning was not done before.—Dr. BARRACLOUGH thought that turning might have been done after perforation. Art ought to have anticipated nature.—Dr. AUST LAWRENCE preferred forceps to turning in cases of contracted brim. He did not think that a living child could here have been brought through by turning.—Dr. PLAYFAIR thought the practice followed in this case was correct. There were two reasons why turning should not have been done—(1) the long prolapse of the cord; (2) tonic contraction of the uterus. Turning was a valuable occasional resource after craniotomy, but he did not think it should be the rule.

MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of this Association was held at Bethlem Hospital on Tuesday, November 17th, Dr. H. Rayner presiding, in the absence of Dr. Eames, the President for the year.

Dr. CONOLLY NORMAN read a paper on some points in Irish Lunacy Law, in which he explained the different mode of procedure which existed in Ireland in regard to the admission and discharge of pauper lunatics, and urged the great desirability of assimilating the lunacy laws throughout the United Kingdom.

Dr. HACK TUKE read a paper on a Recent Visit to Gheel. In the discussion which followed, Dr. Savage and Dr. Pritchard Davies, who had also visited Gheel, gave their experience on the subject, concurring with Dr. Hack Tuke's statements as to the somewhat dull appearance of the place, and the moral dangers and difficulties involved in the supervision of so large an area, but, at the same time, fully recognising the care and kindliness of the authorities.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

THE first ordinary meeting of the session was held on Friday, November 6th.

It was proposed by Dr. Ransom, and seconded by Dr. Whitelegge, "that a special meeting of the Society be called on Saturday, November 14th, for the purpose of considering if any and what steps should be taken by the medical profession in Nottingham in view of the persistent attempts made to impair the efficiency of the vaccination laws." This proposal was unanimously carried.

Mr. JOSEPH WHITE, in giving the President's address, took for his subject "The Present Position of Antiseptic Surgery," in which he drew attention (1) to the methods adopted at or soon after the introduction of the antiseptic treatment of wounds; (2) to the methods now in use; (3) to some objections which have been urged against this plan of treatment; and (4) to some effects upon present surgical practice which may be fairly attributed to its adoption. He reviewed the rise and development of Lister's methods, as based upon Pasteur's theory, as well as some recent modifications by other surgeons; and considered the objections which had been brought forward by Mr. Savory and others—the advocates of the plan of strict cleanliness and diligent care,—as well as the objections arising from the arrest of cicatrisation under the continued use of carbolic acid, and those arising from the absorption of the acid when applied to large denuded surfaces or to serous membranes—e.g., that of the peritoneum. Whilst doubting the advantage of the use of carbolic spray in such operations as ovariotomy, he believed that the greatest benefit had arisen from following this plan of treatment in other operations and for open wounds in the wards of the hospitals, and that the so-called hospital diseases of pyæmia, septicæmia, &c., might (as evidenced by the results of its adoption in many British and continental hospitals) be almost completely arrested by strict and complete ascepticism, and that by it many surgical procedures which were previously considered extremely hazardous might now be adopted with comparative safety.

Reviews and Notices of Books.

A Guide to the New Pharmacopœia. By PROSSER JAMES, M.D. London: A. and J. Churchill.
The Extra Pharmacopœia. By MARTINDALE and WESTCOTT. Fourth Edition. London: H. K. Lewis.
A Physician's Pharmacopœia. By J. BAILY, Pharmacist. London: A. and J. Churchill.
A Summary of New Remedies. By THOMAS M. DOLAN, M.D. London: Baillière, Tindall, and Cox.

THE "Guide to the New Pharmacopœia," by Dr. Prosser James, is essentially a handbook for students and practitioners. It is not what the title page would lead to be inferred—a guide to the whole Pharmacopœia,—but is confined to the 114 new preparations, and mainly to the therapeutic bearing of these. While Dr. Prosser James is somewhat severe in his criticisms of the new Pharmacopœia, his own work is not altogether free from defects of hasty compilation. For example, the dose of liquor arsenii et hydrargyri iodidi is represented to be from "ten to thirty grains," whereas it should be from ten to thirty minims. In the preface we are told that "the author has not hesitated to indicate his own opinion of the value of the remedies under notice, for he had no idea of confining himself to the construction of catalogues and tables, or the repetition of official statements." It is in this that the value of this little volume consists. We cannot, however, approve of the somewhat cynical spirit displayed in the preface towards the compilers of the new Pharmacopœia.

The "Extra Pharmacopœia," by Mr. Martindale and Dr. Westcott, is a new and fourth edition of the small pocket volume already well known to the profession. In the preface to this edition the fact is recorded that the Medical Council, in preparing the British Pharmacopœia, "repudiated the claim of working medical practitioners and of practical pharmacists to have any voice in its production." About one-fourth new matter is added to this edition, thus embracing all the new remedies in the British Pharmacopœia. One very valuable feature in the "Extra Pharmacopœia" is the guide and references to the original papers scattered through the various journals from which it has been compiled. The information is very condensed, but there is still some needless repetition. At page 64 we read, "Aconitine is a *violent* poison, and its action is uncertain unless that of the same maker be always

employed." At page 66 the same fact is repeated, but here it is said that "aconitine is a *powerful* poison; so are all aconite preparations." Such repetition in a pocket volume purposing to be condensed is undesirable. In the list of works to which reference has been made are a number of Pharmacopœias, but we fail to find that of Squire, to which we cannot help thinking reference should have been made, as it is among the most used and best edited of them. The editors claim to have brought into notice or to have suggested change in some seventeen of the new preparations introduced into the British Pharmacopœia, and to have brought under notice in previous editions no less than 116 new preparations. This has led apparently to a more detailed consideration of some agents than of others, some twelve pages being devoted to cocaine and its compounds, and four pages to nitro-glycerine, each containing very valuable information. It would have been better if the work had contained a therapeutical classification of remedies, rather than a therapeutic index of diseases, symptoms, and their remedies. Among the secondary list of drugs, we find that one agent is used "for finishing calicoes, silks, &c.," information better suited to a dictionary of arts than a Pharmacopœia. There is an excellent index to the work, which affords ready reference to the dose of each remedy. Notwithstanding the minor defects we have pointed out, the book forms an excellent pocket companion to the busy practitioner, and a useful work for ready reference to the student.

The "Physician's Pharmacopœia" is a modest but well compiled list of preparations not contained in the ordinary Pharmacopœia, but such as are in popular use and frequent demand. The formulæ have been selected with care and judgment, and, modest as the author's pretensions are, his work will be found very useful to the prescribing physician, to the practitioner, and to the pharmacist.

The "Summary of New Remedies," by Dr. Dolan, is a useful little work, and will help to supply some of the deficiencies of the new British Pharmacopœia. It has evidently been compiled from the medical and pharmaceutical journals, and from trade lists. It displays no great grasp of the subject, and in many instances the information is both imperfect and inaccurate; but, in spite of this, it supplies a want, and will, we have no doubt, command a considerable sale.

The Nature of Mind and Human Automatism. By MORTON PRINCE, M.D., Physician for Nervous Diseases to the Boston Dispensary and to the Out-patient Department of the Boston Hospital.

THE author states in the preface that the basis of his work was written whilst he was a medical student, and that his views have not since changed in any important particular. He appears to think the investigations of most previous writers have been inadequate to define clearly the relationship between mind and matter. The conclusion at which Dr. Prince arrives, founded on the hypothesis that "consciousness may be a change in the mutual relations of the actual and real molecules of the protoplasm of the brain cells—that is, the protoplasmic disturbances, as they really are"—the actuality of so-called neural undulations—may be best summed up in his own words:—"According to this hypothesis, consciousness is the unknown cerebral activities underlying the phenomena which we call neural disturbances or motions..... In other words, a mental state, and those physical changes which are known in the objective world as neural undulations are one and the same thing; but the former is the actuality, the latter a mode by which it is presented to the consciousness of a second person." The question, "What is the ultimate nature of mind?" is allowed by Dr. Prince to be unanswerable; nor is he prepared to say that the molecular disturbances which occur in the brain cells when a sensation is experienced are identical with consciousness.

Brain. A Journal of Neurology. Part XXXI., October, 1885. London: Macmillan and Co.

THIS number contains many highly interesting articles of much excellence. Professor Charcot and Dr. Richer describe a muscular phenomenon observed in hysteria, analogous to Westphal's "paradoxical contraction," or the contraction observed in certain diseases in the tibialis anticus muscle when the foot is suddenly flexed. Charcot and Richer conclude, from their observations and experiments, that the phenomenon is not due, as Westphal thought, to the sudden relaxation of a muscle, but to the stretching of its antagonist. Mr. Jas. McKien Cattell contributes a paper upon the Inertia of the Eye and Brain, describing some ingenious experiments to determine the degree of this. The paper will repay careful study, and we may especially commend to notice the results of his inquiry into the relative legibility of the letters of the alphabet. Dr. Bristowe continues to contribute valuable facts from his rich store of experience. In this number he discusses several cases of Ophthalmoplegia complicated with various other affections of the nervous system, dwelling particularly upon two very remarkable cases, in one of which an autopsy revealed no structural lesions whatever, although the clinical evidence of serious organic disease was most marked. Dr. W. J. Dodds continues his monograph on some Central Affections of Vision; and Dr. Donkin has a note on Spastic Paraplegia, and the treatment of some cases by rest. Dr. Beevor criticises Prof. Hamilton's theory concerning the corpus callosum being not a commissure, but a decussation-system; Dr. Beevor reserves the full grounds for his opinion to the next number of *Brain*. Lastly, Dr. E. Tiegel, of New York, describes a new Induction Apparatus. Clinical cases are contributed by Drs. Daly, Oliver, Hadden, and Ogilvie, and Messrs. Douty and Barritt, and the number is completed as usual by reviews and abstracts.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

THE General Medical Council met on Tuesday last for the transaction of legal and general business; Sir H. Acland, President, in the chair.

In opening the Session, the PRESIDENT said:—The meeting to which it has been my duty to summon you has taken place somewhat earlier than I desired, on account of questions which affect the interests of students in Ireland, and because of some difference of opinion as to the course which should be pursued with regard to them. Other matters also, to which I will briefly refer, could not properly be delayed. The subjects which will demand your attention on this occasion are—(1) The removal of names from the Register; (2) the consideration of your Penal Bye-laws; (3) the conditions for registering the Irish students; (4) the claims of the Colleges of Galway, Cork, and Belfast; (5) the visitation of the Universities; (6) a Report on the New Pharmacopœia; (7) the statistics which have been prepared by your Statistical Committee; and, lastly, certain other questions of large import which you will be asked to bear in mind, even though no resolutions concerning them are formally brought forward. The list seems long, but the time it need occupy you may be short. (1) We must, I think, acknowledge a failure of administration if we continue to print in new volumes of the Register the names of persons convicted of crime in the previous year, and upon whose cases you have not given judgment. This, of course, points to a short meeting for judicial functions at the end of every year. Some, indeed, may lament the duty imposed on us by the Act. So it is, and we have to discharge it in the best manner we can. That cannot be said to be done if we knowingly circulate through every public office the names of persons which might or should have been struck off before the reissue of the volume. It has long appeared to me difficult to discharge

properly our manifold duties without two annual meetings: one meeting being mainly educational; the other, generally a shorter one, for general and legal business. If this were conceded, one would be, as is most usual, about Easter-time, and the other late in the autumn, for the trial of cases and removal of names (if this unhappily be necessary) from the volume of the coming year. If no such law business were pressing, the autumn meeting might be omitted. (2) The Irish Branch Council on Sept. 11th passed a special resolution on this subject. The revised penal clauses of the Standing Orders, as proposed in a report from the Executive Committee, will be laid before you. These Standing Orders, having, as you desired, been submitted to a keen scrutiny by your solicitor and by counsel, do not seem to need much alteration. The great powers which the Council possesses imply a corresponding responsibility for caution in their use. It is satisfactory to believe that our course hitherto has been such as to call for little improvement, though it has been often criticised; and to know that the care bestowed on the penal clauses of our bye-laws by Mr. Ouvry, Dr. Andrew Wood, Mr. Simon, and others, has not been in vain. We cannot expect that this part of our duty will ever be much simplified, or that the proceedings will be shortened. The liberty and the rights of the subject are in Great Britain too sacred to be lightly dealt with. (3) Very few words need be said by me on the case of the Irish students. The resolution which you passed, that an examination must be undergone in mechanics previous to registration, seems to have taken many Irish students by surprise. It is, perhaps, sufficient to say that the Executive Committee, acting on your behalf, directed that the registration of the applicants could take place whenever they passed, and the time of passing be ante-dated, so that they should not lose the year by a circumstance which, in many if not in all cases, was not the fault of the youths themselves. This is a typical instance of the inconvenience which may arise from changes which affect the teaching of the schools, and shows the necessity of avoiding as far as possible frequent alterations in details. (4) In the same manner I may refer, but briefly, to the question of the Colleges of the late Queen's University in Ireland, because the representative of Trinity College undertook to state the case at a future time more in detail, when he proposed that the testamur of general education in the three Queen's Colleges should no longer be accepted. An analogous course was adopted by the Executive Committee in respect to these Colleges to that adopted in respect of passing in mechanics. The Council had decided to remove the Queen's Colleges from the list of recognised bodies upon a general statement of the case against them. When the Colleges learnt the fact they remonstrated. The Committee preferred to run the risk of your disapproval of their again referring the matter to your consideration when you had all the facts before you, to the chance of a wrong being done to Belfast, Cork, and Galway. It is a question partly of competence, partly of legality. The Committee directed the registrar to accept the College testamurs as heretofore till your meeting. The Branch Council for Ireland, with more knowledge than the Committee could have, directed their registrar to abide by your decision and refuse the Queen's College testamurs. I have informed the Colleges respectively that the case will be carefully considered by you without delay. The Executive Committee would have acted with harshness in your name, and would not have shown due confidence in you, had they not used forbearance towards Colleges placed in important towns, and situated in the remoter parts of Ireland, until you heard the whole case. (5) In 1883 you directed the appointment of visitors to inspect the examinations of all the Universities. At the commencement of the year the arrangements were completed. From England, the laborious task was undertaken by Dr. Bristowe, Mr. Holden, and Dr. Barnes; from Scotland, by Dr. Balfour, Dr. George Buchanan, and Dr. Leishman; from Ireland, by Dr. Finney, Mr. Macnamara, and Dr. Kidd. The visitors were distributed, as you are aware, so that England was visited from Scotland and Ireland, Scotland from England and Ireland, and Ireland from Scotland and England. The distances of time and place of the several examinations have made the progress of the work necessarily slow; and although most of the visitors' reports are nearly ready, none are yet complete. By your Standing Orders they will be forwarded to the several Universities, with an invitation for their remarks upon them. The reports will not be transmitted to you until these remarks have been received. You will remember that in the visitation of the corporations, the same visitors visited all the bodies. In this series, as was stated, they were visited by representatives of other divisions of the kingdom than that of the university inspected, and not, therefore, all by the same persons. (6) Every facility has been offered by your office to lighten the labours of the accomplished persons who undertook the report on the new Pharmacopœia, as far as copying and printing could lighten them. The cost of the printing has been great, from the numerous revises which the visitors have in some cases required in order to enable them to combine their separate observations into a single report. The chairman of the Pharmacopœia Committee will communicate some details as to the completion of the third edition of this national work, and as to its reception in this country. The thanks of the Council are largely due to Dr. Quain, and to the editors who acted with him. (7) Mr. Marshall presents his first report on certain statistics of the medical profession, compiled with much labour in conjunction with his colleagues and your registrar. I will not anticipate any of the conclusions at which they arrive, further than to observe that it is an open secret that students still migrate as they did in the Middle Ages—and as they do in Germany now—in quest of teachers whose reputation attracts them, and of other advantages they believe they obtain through this movement. The subject is entangled with various prejudices and fallacies, into which we cannot now enter. The Statistical Committee will deal with some of these. (8) I will briefly allude, in the last place, to certain other questions of large import which are in all our minds. I do not presume to refer directly to the political movement which begins to-morrow by dissolving a Parliament among the most powerful at its outset that has ever met; but nevertheless I must refer to some of the lessons which we may indirectly take to heart, from their bearing on our own work. In the fifteen years that have passed since Mr. Simon, then the medical officer of the Privy Council, addressed the Council in 1869 on behalf of the Lord President, successive Governments—as has more than once been remarked—have, with much good will and most friendly co-operation, sought to help the cause of medical education. Though every Medical Bill brought in by the Government has been withdrawn, yet the progress of medicine in the twenty-seven years that have elapsed since you were constituted a Council has been unsurpassed at any period of history. There seems to be a lesson to be drawn from this, and the lesson is that this Council, and all the licensing bodies now empowered to put names on the Register, ought to be able to say, that although Parliament has been through all these years baffled, yet a State examination, however expedient for State reasons, would not be more certain in its action, nor more practical to its end, than the examinations for which this Council and they are responsible. Many of the best minds in our profession have wished, and still wish, that a State examination should be instituted. The proposed substitute for it was to have been a voluntary combination of the several English, Scotch, and Irish licensing bodies. It must be acknowledged that this substitute has failed. Neither in England, in Scotland, nor in Ireland have all the bodies combined, notwithstanding the long-continued and earnest endeavours conscientiously bestowed upon the scheme. It has been most successful among the corporations in Scotland. In Ireland it does not exist, though all the licensing bodies are situate in the Irish metropolis. In England it has ended in the union only of two great corporations, and the independence of all the others. The attempt of one English University to make a union with these corporations met, unfortunately as I think, with such disfavour that it is known already that it must fail. The two corporations themselves, it is commonly said, are seeking the power to grant "degrees"—that is, "higher titles"—to those or some of those whom they license. The London Society of Apothecaries also asks that its testamur in surgery should be accepted as a surgical qualification; and you will be called upon to say whether, on the merits, it be entitled thereto. The records of the London medical schools and examining boards would furnish a most interesting illustration of individual exertion as distinguished from State aid in the progress of England. From this and other causes there is now less chance than ever of a diminution of the number of medical licence-giving bodies than before. This was the result that was expected by one of the chief supporters of the "conjoint" system of examination, and one of the best

and truest of men, Dr. Parkes, not long before his death. The practical conclusion that would seem for the present to follow from these circumstances is expressed in a report of the Branch Council of Scotland, to the effect that the General Council should establish a systematic inspection of each and all the licensing bodies every year. Whether this is preferable as a permanent arrangement to three State boards in London, Edinburgh, and Dublin, with the resulting independence of all the bodies, is open to argument. But it is in the power of the Council to make this inspection as often as it judges necessary, and to report definitely to the Privy Council any body that fails in its duty, if there be any such. Fifteen years have shown that the Council must rely on its own powers rather than on the goodwill, great though it has been and is, of the Government of the day. We meet here to take counsel together how the medical mind of the future may be most wisely trained in the complex relations of culture, of science, and of practice. We return to our several institutions to put into action, as best we may, the common consultative results, not only for our purposes, but for the good of the nation at large, and in various degrees and ways for the promotion of medical science, and the progress of human knowledge in its bearing on public and personal health. We ought to be, in fact, and by the Act we are to a great extent, bound to be ourselves our own inspectors. It is true that every licensing body sends hither a representative to bring its experience to the rest, but it is as true that each representative is, on returning to his own institution, guardian of the conclusions arrived at by the majority of the institutions, and by the representatives of the Crown. He has the power under Clause 18 of the Act to attend any examination related to any part of medical education, whether of his own or of any other licensing body, whether deputed by the whole Council or not. The truth is—and it is well to look it in the face—the vexed questions of Independent licensing bodies, conjoint boards, and State examinations are part of one of the great political problems of our time—i.e., the relation of central control to local institutions. The failure, half a century ago, of the latter brought the power of the central authority more closely to bear on local details. But there is real risk, as seems to many statesmen, of central guidance becoming so constant as to injure the manly independence which has created England. I confess to a doubt long felt whether the present licensing bodies, either universities or corporations, ought to give qualifications if they each need an inspector to watch every examination. The course which this Council has taken with regard to its recommendations illustrates and confirms these views. Whereas the tendency was, and rightly, some years since to issue recommendations in more and more detail, the last revision, by common consent and after the most careful consideration, has reduced them to a few general regulations resting on broad educational principles. All this being so, it would not become me to make more than passing allusion to the great educational movements which are being discussed in London, or to modes of teaching, or to the best way of utilising the unequalled clinical opportunities afforded by this vast population. But I cannot wholly pass the subject by; it has become mixed up with two questions of much real import to this Council—the state of teaching and the meaning of titles. I will to-day pursue neither subject. Though this Council has mainly to do with results, it is required to ascertain the methods of producing them. Though it has only to do with the testing whether men have the skill and knowledge necessary for their profession, it has to record on its Register titles that profess to represent more than this. It would be to close our eyes to a fact known to all, that part of the movement of students is due to seeking these titles for their supposed social value. But it would be worse than blindness not to see that part of this movement is also because they believe that teaching is better organised in one place than another, and so their parents enable them to move accordingly. Why should they not do so? They adopt this course in Germany with manifest advantage. Are we sure that there is no narrowness and want of elasticity and power of combination in our views on this matter? I have thus ventured respectfully to give utterance to some thoughts of the present state of our functions and duties, and of the relation of the medical profession and its various institutions in Great Britain to the Legislature, because I feel that each time we meet it may be for me, and soon must be, the last. I wait only to feel sure that my earnest desire to carry out your wishes in such ways as I am able, can no longer serve you, in order to retire from the most honourable and the happiest work that I have, and to make way for a younger and a stronger man.

Mr. MARSHALL moved that the President's address be entered on the minutes. That address had been partly narrative, partly historical, partly judicial, and partly educational. It contained matter for serious reflection, and the members of the Council would benefit by studying it attentively.

Dr. HUMPHRY seconded the motion.

Dr. HAUGHTON, as a representative from Ireland, supported the motion. He said he felt very strongly that the Council was indebted to the President for his address, which had been delivered at a time when perhaps Scotland and Ireland had something to say about the proposal to confer university powers upon English corporations. Oxford and Cambridge had by their inaction allowed judgment to go by default, and had not done their duty to medical education. His opinion was that the Scotch and Irish universities would have to fall back upon themselves, and let England take care of itself.

The resolution was unanimously agreed to.

Dr. HUMPHRY moved the appointment of Sir Henry Pitman, Dr. A. Smith, and Professor Struthers as the Business Committee.

Dr. QUAIN seconded the motion, which was agreed to.

The following communication from the Royal College of Surgeons of England was read:—

"July 11th, 1885.

"SIR,—In reference to your letter of the 19th of May last, relating to the case of Francis Goold, a member of this College, who was convicted of felony at Auckland, New Zealand, on the 2nd of December, 1876, and in pursuance of the requirements of the Medical Act, I am desired to communicate to you the following resolution, adopted by the Council of the College on the 11th ultimo, and confirmed on the 3rd instant—viz., 'That, in the opinion of the Council, the criminal offence of which Francis Goold has been convicted is of such nature as to render him unfit to remain a member of the College, and that he accordingly be removed from being a member of the College.'"

"I am, Sir, your obedient servant,

"W. J. C. Miller, Esq." "EDWARD TRIMMER, Secretary.

Mr. MARSHALL said that Francis Goold had been convicted of manslaughter, and therefore the Council of the College of Surgeons had removed his name from their roll. He moved that the qualification be struck out from the Medical Register.

Dr. HUMPHRY seconded the motion, which was agreed to, as was also a proposal to erase the name of Francis Goold from the Register, he having no other qualification than that which had been ordered to be struck out.

A communication was received from the Royal College of Surgeons of England with reference to unprofessional advertisements issued by Mr. Thomas Clarkson of Darnley, Ripley, admitted a member of the College in 1832, and stating that the advertisements had been adjudged by the Council of the College to be "prejudicial to the interest and derogatory to the honour of the College, and disgraceful to the profession of surgery," and that his name had been ordered to be removed as a member of the College.

Mr. MARSHALL stated that letters had been sent from the College to Mr. Clarkson inquiring whether the advertisements in question had been inserted by his authority. In reply, he stated that he had acted as a specialist for forty years, denied that his remedy was a secret nostrum, and stated what the nature of his remedy was. Mr. Clarkson was then informed that the Council considered his advertisements objectionable, but that if he was prepared to promise that he would cease to publish them in any form inconsistent with the provisions of the bye-laws, the Council would take no further action in the matter. Mr. Clarkson, in reply to the communication, stated that he considered the Council was acting in an arbitrary manner, that he had paid for his advertisements to the end of the year, and could only promise to consider the question seriously when the time arrived. The advertisement referred to was headed "Bad legs. Clarkson's celebrated specific. The only sure remedy. Wonderful cures throughout England; testimonials, many from ministers, sent." Mr. Clarkson's name having been removed from the register of the College of Surgeons, he (Mr. Marshall) moved that the qualification should be removed from the General Register.

Dr. QUAIN, in seconding the motion, said that he thought it was unnecessary on the part of Mr. Marshall to state the reasons for the action of the College of Surgeons. It was quite enough to know that they had removed Mr. Clarkson's name from the register. The Council had nothing to do

with inquiring into the reasons for their action. It might, however, be as well to direct the attention of the Society of Apothecaries to the fact that Mr. Clarkson's name still remained on their register.

Mr. SIMON said he thought the Council had a right to know the grounds for the action taken by the College of Surgeons.

Dr. DUNCAN moved that the attention of the Society of Apothecaries be directed to the case under discussion, with a request that they would express their opinion upon it; but he withdrew the motion on Mr. Bradford's promising to bring the matter before the Society.

A certificate was received from the Executive Committee of the conviction of Thomas Millerchip, registered on August 5th, 1873, with the qualifications L.F.P.S. Glasg., 1873, and L.R.C.P. Edin., 1873. It appeared from the certificate that Mr. Millerchip was sentenced at the Warwick Assizes to ten years' penal servitude for having feloniously used an instrument to procure a miscarriage.

Sir HENRY PITMAN moved that Mr. Millerchip's name be removed from the Register. As he was undergoing a punishment of ten years, it was clear that the public would be deprived of his services as a practitioner, but the object of the Council was to purify the Register from the names of all persons committing such offences. The motion was seconded by Dr. A. SMITH, and unanimously agreed to.

A communication was received from the King and Queen's College of Physicians in Ireland informing the Council that the name of Dr. Robert Locke Evans, of Carrickfergus, was, by resolution of the College, October 2nd, ordered to be erased from the roll of Licentiates in Medicine and Midwifery.

Dr. A. SMITH moved that the qualification in question should be removed from the Register, but declined, in answer to a question from Mr. Simon, to state the reasons upon which the King and Queen's College had acted.

The PRESIDENT said he had consulted with the solicitor on the question of the discretion of the Council. It had been the custom of the Council to instruct the Registrar to remove a qualification from the Register which had been removed by the body that had conferred it. If the Council decided that a particular qualification should not be removed, it would then remain on the Register, although it did not actually exist. That, of course, was a point which ought to be taken into consideration.

Mr. SIMON considered that the Council ought to be treated with respect by individual members. He (Mr. Simon) should decline to vote for the removal of any qualification without knowing the particulars of the case. If the qualification in question were the only one possessed by the person concerned, the result of the removal would be the removal of the name altogether from the Register, and that would be a very serious proceeding.

Dr. HAUGHTON said he did not know for what reason the name had been removed from the Register of the King and Queen's College of Physicians, but he thought it was a case of advertising. The name of the person still remained on the list of the College of Surgeons, Ireland, who had taken no action in the case.

Dr. QUAIN said that if the Council declined to remove the qualification from the Register, they would allow something to remain on which really had no existence.

Mr. SIMON said the Council did not know whether the qualification had been removed on account of the holder of it adopting any particular theory of medicine or surgery; in that case the removal would be illegal.

Dr. A. SMITH said he intended no disrespect to the Council, but was only acting on principle. He might state, however, that the qualification was not removed on account of the person holding it adopting any peculiar theory of medicine or surgery. He should decline to give any further explanation unless he was instructed to do so by the college concerned.

Dr. BANKS said he did not know the grounds for the removal, but he was able to state that the college had never removed a man from its roll who did not well deserve it.

Dr. STRUTHERS thought that the Council had no power to remove a qualification simply because a corporation had removed it. The removal might have been effected for reasons of which the Council disapproved.

Dr. LYON said that as a Fellow of the College he would appeal to Dr. Smith to give a brief statement of the facts of the case, which was evidently desired by many members of the Council as well as by himself.

Dr. HUMPHRY said that the Act of Parliament declared that no qualification was to be removed unless the Council saw fit, so that there was evidently a discretion vested in the Council.

Mr. SIMON moved that the consideration of the case be postponed until the Council should have been informed of the nature of the offence for which the King and Queen's College of Physicians, Ireland, had ordered the erasure of Dr. Evans's name.

Sir HENRY PITMAN seconded the amendment.

Mr. FARRER, in answer to a question, stated that the Council had undoubtedly the power of refusing to make its list a correct one, but the Act of Parliament was very strong as to its duty of keeping the Register correct. The case under discussion was the only one which he could remember in which the Council had not been informed of the reason for which the name was struck off, and it did not appear to him to be unreasonable that some such statement should be made.

Dr. DUNCAN said that the Register would not be incorrect if it retained the qualification, because it was only a record that the qualification was possessed at the time of registration; it did not imply that the person still held it.

After some further discussion, Mr. Simon's amendment was put and agreed to. On its being put as a substantive motion,

Dr. LYON moved an amendment—"That the consideration of the case of Dr. Robert Evans be postponed until the Council shall have taken the opinion of counsel as to the powers and duties of the Council with regard to cases in which the qualifications of practitioners are struck off the list of members of licensing bodies, and as to whether the Council can require such bodies to state the reasons for striking off the qualifications of such practitioners."

Dr. A. SMITH seconded the amendment, which, after a brief discussion, was put and negatived.

Mr. SIMON's proposal was then put, and carried by a majority of 12 to 4.

A communication was received through the Executive Committee from the Queen's Colleges of Galway, Belfast, and Cork, protesting against the removal of their examinations from the list of preliminary examinations recognised by the Council.

Dr. HAUGHTON said he did not think that the Executive Committee had power to set aside the resolution of the General Council in reference to the examinations of the Irish colleges; but he believed the proposal he was about to make would save all trouble and a great deal of time. The Examination Committee had asked for information from the colleges as to the examinations and standards, but it had not been forwarded, and hence the resolution of the Council removing the examinations from the list. The necessary information had since been communicated, and he would propose that it be referred to a committee to consider and report thereon to the Council.

Mr. TEALE seconded the motion.

Dr. STORRAR said that, in his view, the colleges had not a leg to stand upon in regard to the recognition of their examinations. They were merely colleges, not universities, and they did not issue any returns of their examinations. The Council might as well recognise the University College of London, or King's College, or Queen's College, and other provincial bodies of the same kind. He did not wish to bring any charges against the Irish colleges, but the Council had good ground for entertaining considerable doubt as to whether their examinations could be regarded with perfect confidence. They were originally recognised, without much consideration, on the statement of Sir Dominic Corrigan, who, when afterwards interrogated on the subject, wrapped himself in impenetrability, and declined to give any answer.

Dr. BANKS said that the colleges in Ireland had done much for higher education, and their examinations quite came up to the standard required by the Council. They had been for many years recognised, and he hoped that they would, as a matter of justice, be restored to the list adopted by the Council. He did not know how it was that answers had not been sent to the requests for information; but the presidents of each of the bodies had authorised him to state that they had never received the communications in question.

Dr. STRUTHERS thought that injustice had been done to the Queen's Colleges, which were most admirable institutions, which ought to be encouraged, rather than mere examining bodies like the London University, which was not a university at all (at least from a Scotch or German point of view),

and which appeared to have been of late a good deal discredited in London. He would move, as an amendment to Dr. Haughton's proposal, that the examinations of the Queen's Colleges be restored to the list of recognised examinations.

Dr. STORRAR asked if either of the colleges conferred degrees. They were merely colleges that had crept under the wing of the Royal University.

Dr. BANKS said that the colleges were not affiliated to the university, but the majority of the men educated in them went to the university.

Dr. LYON asked by what authority the Executive Committee had practically annulled the resolution of the Council—a violent and revolutionary proceeding such as he had never known in the history of the Council, and such as might lead to its disruption.

Dr. HUMPHRY said that the question raised by Dr. Lyon was an important one, but it had no bearing on Dr. Haughton's motion.

The subject was then referred to a committee consisting of Dr. Haughton, Dr. Watson, and Professor Humphry, to consider and report.

The PRESIDENT, referring to the point raised by Dr. Lyon as to the action of the Executive Committee, said that it was taken somewhat hurriedly at the last meeting of the Council, and it had led to remonstrances being sent to the Executive Committee from the three bodies concerned. The Executive Committee was appointed to act in behalf of the Council when it was not sitting, and as the matter had been discussed in the Council, they thought it their duty to act rather than summon the Council on a comparatively small matter. They considered that the Irish bodies, having been so long on the list, might remain for a short time until the Council met again. The colleges had done good educational service, and it was considered that they ought not to be disfranchised without a full consideration of the question. If he (the President) had had less confidence in the Council than he had, he might have thought it necessary to summon them for the purpose.

After the transaction of some formal business the Council adjourned.

WEDNESDAY, NOVEMBER 18TH.

The report was received from the Executive Committee on the standing orders relating to complaints against registered medical practitioners, and to removal of names from the Register. The Committee reported that they had carefully considered the sections of the orders referred to, and recommended that Chapters 11 and 14 be annulled, and that other orders be substituted for them.

The Council resolved itself into committee for the purpose of considering the report.

Clauses 1, 2, and 3, providing that applications should be first investigated by the Branch Council, were adopted.

On the discussion of Clause 3 (providing that the Branch Council should send a statement of the case to the registrar), on the suggestion of Dr. Heron Watson, Mr. Muir Mackenzie (who, as the counsel consulted in the drafting of orders, was in attendance), was requested to reconsider the bearing of Clause 29 of the Medical Act on Clauses 1, 2, 3, and 4 of the orders as to Parliamentary procedure, with a view of distinguishing cases of conviction by courts of law and cases of misconduct in a professional respect. Other clauses prescribing the mode of procedure to be adopted in summoning accused persons and adjudicating on their cases were agreed to. Clause 12, with reference to the questions on which the Council should be asked after deliberation to vote, was remitted to the consideration of Mr. Muir Mackenzie. The Clause (13) was also referred for reconsideration.

Dr. SCOTT ORR moved, "That the list of names and qualifications erased from the Medical Register by order of the General Medical Council, for the reasons assigned in each case, be published annually as an appendix to the Medical Register."

Dr. A. SMITH seconded the motion, which was agreed to.

Dr. SCOTT ORR also moved, "That intimation, by means of a registered letter, be made to those whose names are erased from the Medical Register by order of the Medical Council." He said that a case had been recently tried in Scotland, in which a person whose name had been removed from the Register had advertised himself as a registered medical practitioner; and that on a prosecution he was acquitted on the ground that no evidence had been given of his having been informed that his name had been removed.

Dr. QUAIN suggested that a registered letter would not be sufficient to meet the case. He moved that personal notice be given by the solicitor to the person accused informing him that his name had been removed.

Dr. SCOTT ORR adopted Dr. Quain's proposal, which was agreed to. He then moved, "That on the application of any of the medical authorities in the United Kingdom the registrar of the Council be in future empowered to present such medical authority with a bound copy of the Minutes of the Council as they are published."

The motion was agreed to.

Mr. SIMON gave notice that he would move to rescind the motion just passed for the annual publication of erased names and qualifications. He was sure, he said, it had been passed without due consideration.

Dr. H. WATSON gave notice that he would ask whether any action was proposed to be taken under Clause 29 of the Medical Act by the Branch Council of England or the General Medical Council in connexion with the case of a registered medical practitioner, a member of the Royal College of Physicians, London, whose name had been recently brought before the public as a witness in a criminal case, and whose professional conduct the judge had animadverted on in very strong terms.

The PRESIDENT stated that he had received private notice of a question which he would only answer in private. Strangers were thereupon requested to withdraw.

On the readmission of the public, an interim report was presented by the Statistical Committee appointed in May last to superintend the preparation of statistical returns relating to the medical profession of the United Kingdom. The report was accompanied with a summary of statistics regarding medical students registered as such in the year 1871, with some additional tables and diagrams, by way of commencement, having reference to all persons registered in the Medical Students' Register in the decennium from 1871 to 1880.

Mr. MARSHALL, in moving the adoption of the report, said he did not invite any criticisms upon its details. Such criticism should be reserved for the complete report, which would be presented when the committee had concluded its investigations. He highly complimented the registrar for the great industry and ability with which he had assisted the committee in the preparation of the statistical tables, and expressed a hope that his services would meet with some substantial recognition at the hands of the Council. The expense hitherto incurred in the employment of skilled assistants had been something under £200.

The report was received, and ordered to be entered on the minutes.

The following report from the Pharmacopœia Committee was received and adopted:

"The Pharmacopœia Committee report that at their meeting held on this day, November 17th, the Chairman informed them that the new Pharmacopœia, when completed, had been presented to the Executive Committee, who had ordered 20,000 copies to be printed; that the work had been submitted to the Treasury, who had approved of the price—viz., 6s. per copy—named by the Executive Committee; and that the work had been duly advertised in the *Gazette* of Sept. 1st, 1885, as prescribed by the Act of Parliament. The Chairman further stated to the Committee that he had been informed by the Registrar that up to Saturday, the 14th inst., 12,875 copies of the work had been disposed of. The committee suggest the advisability of reappointing the present committee as a standing committee, with power to appoint a sub-committee with the following duties:—(1) To superintend generally all matters relating to the Pharmacopœia; (2) to appoint one or more persons to report to the sub-committee on the subjects of materia medica and therapeutics; (3) to prepare for publication, by way of appendix to the present Pharmacopœia, when necessary, such changes or additions as may be deemed desirable, for which purpose a sum, not exceeding £100 per annum, should be placed at their disposal, for the payment of a reporter or reporters, and for conducting such inquiries as may be thought desirable; (4) to report annually to the General Council on their proceedings during the previous year.

"November 17th, 1885." "RICHARD QUAIN, M.D., Chairman.

A communication was received from the Local Government Board asking the opinion of the Council as to whether a person holding the diploma of the Apothecaries' Society only was entitled to practise both medicine and surgery in England and Wales. The inquiry, it was stated, arose out of a letter to the Local Government Board from Mr. W. G. Bower, asking whether the diploma of the Society of Apothecaries was sufficient to confer a qualification in surgery as well as in medicine for the purposes of an appointment of Poor-law Medical Officer.

Mr. SIMON said the contention put forward or suggested in Mr. Bower's letter was a just one—viz., that if a man had been examined by a licensing authority in all the three

branches of practice there was no reason why the Local Government Board should draw any distinction as to his fitness for practice in those branches. The word "qualification" had, of course, two senses, the one practical and the other legal, and the question was whether the title of qualification implied the requisite skill and knowledge for the practice of surgery. How were they to judge of that? The Medical Act did not limit in any respect the scope of the examinations of the licensing bodies. At the time the Act was passed there were half-qualifications, and in one clause a distinction was drawn between those qualified to practise surgery and medicine, and there were titles of qualification that related only to the one or to the other; but then the examinations also related only to one or the other. The College of Physicians was the first to enlarge the scope of its licensing examination; having previously examined only in medicine, it took to examining also in surgery. The Society of Apothecaries had now followed the same course, and though down to a late period they examined only in medicine and midwifery, they had now begun to examine in surgery. So far as the examination extended, subject always to Clause 22 of the Act, the qualification must be taken to be evidence of the knowledge of the individual; and he was strengthened in that view on looking at the action taken by the Society of Apothecaries. Thirteen months ago a resolution was passed by the Council stating that no person should be granted a degree, diploma, or licence to practise registrably under the Medical Act unless he had proved his competency in medicine, surgery, and midwifery by passing examinations in those subjects at one or more of the licensing bodies. That was in effect a compulsory resolution, and the Apothecaries' Society were bound to give effect to it. He was not aware that the examinations of the Apothecaries' Society had been impugned, and therefore they were unquestionably *primâ facie* evidence of qualification in all the three departments of practice to which their examination extended. He saw no reason why the licence should not be received by the Local Government Board as covering the three branches of practice. The only point that could be reasonably raised was whether the Society of Apothecaries had gone beyond its rights, but it seemed to him that it had not. It might be said, if they had this power why did not they exercise it from the first? He supposed they did not think it necessary to do so, but that would not bar them under the Act from exercising it under the pressure of such a resolution as that passed by the Council. The College of Physicians had existed for 320 years without exercising the power, and the mere lapse of time could not prevent them doing so. There could be no doubt that when the Apothecaries' Society received their permission to examine in medicine that very large term included the right to examine if they saw fit in surgery; but whether it was so or not, it was certain that the Council had passed a resolution that a man ought not to be registered as a licentiate of the Apothecaries Company unless he had been examined in surgery. It could not be supposed that the Council meant to annihilate the Apothecaries Company, and he submitted that only one answer could be sent to the Local Government Board.

Mr. TEALE said that the question was probably one of the most difficult that had ever come before the Council. The difficulty depended upon the double meaning of the word "qualification." By the Medical Act certain bodies that were supposed only partially to qualify medical men were allowed to put their members on the Register, but the Medical Council, feeling that it was not right to register men who were imperfectly educated and examined, required that the examinations should in some way be complete, including surgery and midwifery as well as medicine. The question was whether persons having the ability and knowledge required by the Council were skilled in a legal point of view so as to acquire the right mentioned in Clause 31 of the Act—the right to practise according to their qualification or qualifications, medicine or surgery, or medicine and surgery. Could any of the bodies that were supposed only to have the power to licence in medicine or surgery acquire the power to confer the legal right on their licencees by making their examinations complete in the sense required by the Council? That was an important point to be ascertained. It was probably a legal question which the Council was not competent to decide.

Dr. HERON WATSON said it would be a dangerous thing to arrive at a distinct conclusion upon the matter without a very careful consideration of all the surrounding circumstances of the case. The question was not an entirely new one; it cropped up as early as 1859, when Dr. Corrigan presented a report on the subject. It arose out of the question as to what were the privileges of the different bodies that sent representatives to the Council. The universities and colleges, it was understood, had to elect whether they would represent the surgical or the medical side of physic. The universities and the College of Physicians elected to represent physic, the College of Surgeons to represent surgery, and the Society of Apothecaries to represent medicine. At a later period the universities of Scotland saw that it was in their interest to give what might be called a double qualification, and the way in which they did it was by going to the Privy Council and obtaining the necessary permission. Under the present circumstances, he thought that the best way would be to adopt the mode of procedure of 1859, and appoint a committee to consider the question, and frame a suitable answer to the Local Government Board with reference to the point submitted. The committee, of course, could not report during the present session.

Dr. STRUTHERS said that the question as to the meaning of the word "qualification" had been settled twenty-five years ago, and he was surprised that Mr. Simon should now raise it. When the Medical Bill passed, it was discovered by Prof. Syme that it established a double qualification. In Scotland they had always regarded one qualification as sufficient, and each body had a complete examination, but it was ascertained that the clause of the Act made them only half qualifications, and hence arose the necessity for a joint examination between the Edinburgh College of Surgeons and Physicians and the Glasgow Faculty in order to give a complete qualification. The clause stated that every person registered under the Act should be entitled according to his qualification or qualifications to practise medicine or surgery, or medicine and surgery; so that it was evident that medicine did not include surgery. Everyone accepted the Act as establishing a double qualification. The effect of such a motion as Mr. Simon had suggested would be to make them all fly asunder again, so that all the twenty-one bodies would become independent licensing bodies. He would rather feel disposed to move that the Council, in view of Section 31 of the Medical Act, regarded the licence of the Society of Apothecaries as a qualification in medicine, but not in surgery. Either that was so, or they had been all wrong during the last quarter of a century.

Dr. STORRAR said that the London University, according to its charter, had conferred a degree in medicine, but it examined in medicine, surgery, and midwifery. When the Medical Act passed, the question was whether universities could confer a degree of Master of Surgery. The matter was brought before the Privy Council by the Scotch corporations, with the result stated by Dr. Struthers. The University of London still found that it was in some difficulty, and in order to remedy it, it obtained a special charter so as to enable it to give the two degrees of Bachelor of Medicine and Bachelor of Surgery, and also later on the degree of Doctor of Medicine, or Master of Surgery, according to the choice of the candidate. He could not help thinking that that would be something like a precedent which might be followed. The two qualifications were regarded as essentially different; and it was understood that the difficulty could only be removed by some legal process. He confessed that he saw great difficulties in the question, and he thought that the safe course would be to state, in answer to the letter of the Local Government Board, the way in which the matter had been hitherto dealt with.

Mr. SIMON said that that was not the case with the College of Physicians. The Local Government Board accepted the testamur of that body for both purposes.

Dr. STORRAR said that in the charter of the College of Physicians there was distinct mention made of surgery.

Mr. SIMON said that the rights of the College in regard to surgery were preserved on the general principle that physic included surgery, and what was sauce for the goose was sauce for the gander. If the Society of Apothecaries examined in three branches, their licence, according to that analogy, ought to carry the right to practise in the three branches.

Sir HENRY PITMAN said that it was stated in the charter of the College of Surgeons of Charles II. that no one should practise surgery in London, or within seven miles thereof, except licentiates of the College of Physicians.

Mr. MACNAMARA asked if a M.B. of London University was qualified to practise medicine and surgery.

Dr. STORRAR said he was not called upon to express any opinion upon that point.

Dr. CHAMBERS said that the University of Oxford examined for surgery and medicine, and considered that the degree of Bachelor of Medicine, which was a registrable qualification, entitled the practitioners to practise medicine, surgery, and midwifery. The University did not give a degree in surgery at present. It was not likely that it would give a Bachelor's degree, but it might perhaps give a degree hereafter of Master in Surgery.

Dr. BANKS said that the body he represented gave no one a degree of Master in Surgery unless he had first taken the degree of Bachelor in Medicine.

Dr. A. SMITH said that the Council ought to be cautious in expressing an opinion on the subject. He believed that the charter of the Society of Apothecaries contained no word about surgery. It had, however, chosen to examine in surgery, and on that account claimed to give a title to practise in surgery.

Mr. COLLINS said that the Society of Apothecaries had only acted in obedience to a resolution of the Medical Council requiring a complete examination,

The communication from the Local Government Board was ordered to be entered on the minutes, and the further consideration of what answer should be forwarded was adjourned.

HEALTH REPORT OF THE EGYPTIAN ARMY IN 1884.

IN March, 1883, a board was appointed to consider the steps necessary for the reorganisation of the medical service of the Egyptian Army. It reported in April, 1884, but owing to difficulties in obtaining suitable buildings for an army hospital, its recommendations were not carried out till late in that year. The department previously to the reorganisation was as inefficient as could be conceived. A surgeon and an apothecary were appointed to each battalion, and there was scarcely any administrative supervision exercised over them. The pay of the surgeon was about £3 a month, and he was obliged to eke out his income by the universally practised system of "backsheesh." All duties were performed in a careless and perfunctory manner. The medical officers visited their sick how and when they pleased, and as a rule were uneducated and ignorant. The sick were, in the first instance, treated in a detention-room in the barracks.; but if the case was considered serious or to require hospital treatment it was sent to the civil hospital, and generally lost sight of by the military authorities. The sanitary condition of the detention-rooms was deplorable, and they were no doubt a fruitful source of disease. In the autumn of 1883 the reorganisation of the medical service was commenced, and the system of station hospitals was introduced in lieu of the regimental. A suitable room was provided in the barracks, where the sick of the brigade were to be seen by the surgeon, and, if necessary, detained for not more than twenty-four hours, or, if deemed advisable, sent at once to the military general hospital. A medical officer was appointed to the cavalry, the artillery, and to each brigade of infantry, and five surgeons and three apothecaries to the general hospital, and were all put under the orders of an English principal medical officer. For this post Surgeon-Major Rodgers was selected, with the rank of Surgeon-General in the Egyptian army. The officers attached to corps are all available for hospital duty. A staff serjeant of the Army Hospital Corps was appointed chief steward, and a hospital corps was organised, the orderlies being selected from the battalions, and, as in our service, liable to be returned to their battalions in the event of misbehaviour or negligence. The dieting of the patients was undertaken by a contractor, and worked well. The equipment of the hospital was very indifferent, but was supplemented, and replaced, when practicable, from English army stores. The new organisation was got into fair working order by the beginning of 1884, but it had to undergo considerable modification when the troops took the field up country and at Suakim. Three additional English medical officers were then appointed to take the supervision of the service—one at Suakim, one up country, and one in charge of the hospital at Abbassieh, thus enabling the principal medical officer to devote his time to administrative work. In February troops were sent to Assouan and Suakim, and this was continued till all the army was employed in the Soudan with the exception of one battalion. Before the end of the year there were nine separate hospitals in working order between Assouan and Dongola, with accommodation for 210 sick, besides one at Suakim with forty beds. "The constant movements of troops and the opening of so many hospitals was a great strain on the new department, and was borne far better than could have been anticipated." There has been a considerable increase made to the very inadequate pay of the medical officers, and although it is still doubtful whether the service will ever be popular, it is hoped that satisfactory results may be obtained.

The hospital at Abbassieh appears, on the whole, to be in a more satisfactory condition than might have been anticipated, and the sanitary arrangements are good, no latrine, drain, or cesspit being within the walls of the hospital. At Suakim the hospital was got into a fair sanitary condition, and the health of the troops was exceptionally good, but an outbreak of scurvy occurred in the middle of August and lasted till the middle of November. Surgeon-Major Galbraith took prompt measures to meet it by the issue of beef and vegetables, and the reduction of the work of the men. He also directed his exertions to improve the sanitary arrangements of the town and harbour, and reports that "on the whole, Suakim is now as clean as any eastern town of its size that I have seen, and compares very favourably indeed with Suez and many others in Egypt." At Assouan the barrack appropriated for a hospital was most unsuitable, and a hospital ship, moored in the middle of the river, was used for the treatment of the sick, double fly tents being used in the camp as detention huts. At the other stations the sick were treated in the field hospitals. Owing to the army being constantly on the move, it has been impossible to furnish returns showing separately the state of health of the different divisions, but those for the whole force afford very satisfactory results. The average strength for the year was 6450; the admissions to hospital were 3709, the deaths from all causes 48, the invalided 297, and the average constantly sick 155. These numbers give the proportion of 575 admissions, 7·44 deaths, 46·05 invalided, and 24·03 constantly sick per 1000 of the strength; all, except the invaliding, remarkably low ratios, especially considering the composition of the force, its sanitary surroundings, and the excessive heat to which it was exposed during the summer months. The most prevalent diseases were those of the eyes, which gave rise to 95 admissions per 1000 of the strength; next in frequency were continued and paroxysmal fevers, of which 79 cases were admitted per 1000; diseases of the digestive system furnished 73, and of the cutaneous system 65, cases per 1000. There were 28 cases of enteric fever reported, with 8 deaths; 11 deaths, or nearly one-fourth of the total, were caused by diseases of the digestive system, 10 by dysentery and diarrhœa, and 1 by enteritis. Calculus appears to be a very prevalent disease, 5 cases of vesical and 22 of renal having been admitted; the former were all successfully treated by lithotrity. Bilharzia hæmatobia gave rise to 44 admissions; none of the cases proved fatal, but a considerable number were invalided. There were only 17 admissions for wounds received in action, and one death, out of hospital, returned under that head. In reference to the high proportion invalided, the principal medical officer remarks that "it must be borne in mind (1) that the army is a conscript one, and that, with a constant fresh supply of men available, it is cheaper for the State to invalid those not likely to be fit for service for a lengthened period than to retain them as non-effectives in hospital; (2) the Medical Department having only really commenced its work in the year 1884, it was found necessary to invalid many men who, if properly examined, should never have been accepted as recruits." Of the invalids, 88 were discharged for "debility," being in the ratio of 22·6 per 1000 of the strength. The results as given in this report show a remarkably low rate of sickness and mortality for a force employed on field service, if the returns include all the different portions of the force, and if all the deaths have been reported. It would be satisfactory to know whether these have been in any way checked, as in our service, through the military returns. The satisfactory condition of the health of the force reflects great credit upon the medical officers who were charged with the reorganisation and working of the department; and we trust that the results in future may fully realise the promise held out by the success obtained in the past year.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 21, 1885.

THE report of the English Commission upon the Etiology of Asiatic Cholera has at length been made public. From the writings and speeches of Dr. KLEIN before the Royal Society and the Royal Medical and Chirurgical Society, the profession has been made well aware of the main tenour and purport of the observations contained in this report, and the conclusions which have been drawn therefrom. The Commission was appointed to test the validity of Professor KOCH'S allegation that the comma bacillus is the cause of cholera. After repeating the inquiry on the lines pursued by KOCH, Drs. KLEIN and GIBBES arrived at a precisely opposite conclusion; for not only do they differ from KOCH on matters of inference, but also on more than one important question of fact. This was clearly shown at the debate before the Medical and Chirurgical Society, so that the reader of this report seems to be taken back to the details of a controversy which he had wellnigh forgotten. Yet we venture to think that there will be found within the pages of the report many facts which received less prominence at the Society than they deserved, and the case against the views of KOCH is stated with greater fulness. Nor need we regret the delay in publication, since that has been owing to the desire on the part of the Government that the report should be first submitted to the consideration of an influential committee, and it therefore appears before the world with such greater force as these distinguished authorities can give to it. Of course, if the points in dispute were simply questions of observation and experiment, no committee could venture to adjudicate without witnessing the actual investigations by both parties; but where, as in the present instance, the question involves the framing of logical inferences and the weighing of evidence, the opinion of a committee of impartial and experienced men must bear considerable value.

The committee to which the Secretary of State for India submitted the report of Drs. KLEIN and GIBBES consisted of the following eminent authorities: Dr. W. AITKEN, Dr. BURDON SANDERSON, Dr. N. CHEVERS, Dr. DE CHAUMONT, Sir J. FAYRER, Sir WM. GULL, Sir W. GUYER HUNTER, Sir W. JENNER, Dr. TIMOTHY LEWIS, Dr. J. MACPHERSON, Dr. J. A. MARSTON, SIR W. SMART, and Dr. J. SUTHERLAND. There can be no question that some of these gentlemen hold and have defended very decided views upon the nature of cholera; but there was little fear of the general decision of the Committee being unduly influenced in any one direction, seeing that the scope of the Committee's labour was limited to the particular question of Dr. KLEIN and Dr. GIBBES' report. Sir W. JENNER presided over the meetings of the Committee, and doubtless materially aided in keeping the main purpose of their meetings in view; whilst, with the able assistance of Dr. TIMOTHY LEWIS, who himself contributed some very pertinent observations, a memorandum was drawn up, which deserves the earnest consideration of those who have studied the subject from other points of view. Deferring to our next issue an analysis of the report itself, we may briefly draw attention to the subject matter of the Committee's memorandum, which fairly covers the whole ground. We are reminded that the mission of Drs. KLEIN and GIBBES, undertaken at the instance of Sir JOSEPH FAYRER, was to investigate the question which had been raised by Dr. KOCH'S alleged discovery of the cause of cholera in the micro-organism to which he gave the name of "comma bacillus." The discovery of comma bacilli in the choleraic dejecta is due to KOCH, and is about the only point upon which Drs. KLEIN and GIBBES have fully corroborated KOCH'S statements. For, as the Committee point out, there is direct conflict of evidence upon the three main propositions of KOCH'S argument—viz.: "1st. That the number of comma-shaped organisms in the intestinal tissues and contents is in proportion to the acuteness of the attack, and that these organisms generate within the body a ferment by which the system is poisoned; 2nd, that they are not found under any conditions other than in connexion with cholera; and 3rd, that their presence in a tank which supplied certain cholera-affected villages in Calcutta with water, was practically a proof of the causal connexion between the organisms and the disease." Upon each of these questions the Committee appeal to the report of Drs. KLEIN and GIBBES, which they characterise as being, like most other investigations recently undertaken to elucidate the etiology of cholera, an attempt to confirm or refute the doctrine that the disease is caused by a microscopic comma-shaped organism, and the general results of such inquiries are thus summarised:—

"1. That comma-shaped organisms are ordinarily present in the dejections of persons suffering from cholera.

"2. That they are not to be found in the blood nor in any of the tissues, including the mucosa of the small intestine when the latter is examined in a fresh condition.

"3. That comma-shaped organisms of closely allied morphological appearances are ordinarily present in different parts of the alimentary tract in health; that they are developed to an unusual extent in some of the diseases characterised by hyper-secretion of the intestine; and that there are grounds for assuming that, when any predominant form is observed, it is in great measure attributable to the nature of such secretion.

"4. That the comma-shaped bacilli ordinarily found in cholera do not induce that disease in the lower animals, and that there are no real grounds for assuming that they do so in man, whilst the circumstance that they have been found in tanks which constituted the ordinary water-supply of adjacent villages unassociated with the presence of the disease goes to negative any such assumption."

In point of fact, the verdict of the Committee is, as regards KOCH'S case, one of "not proven"; and although we might have wished that there had been something more positive to set in the place of the abandoned doctrine, we may at least congratulate the country that the Government of India are making arrangements for the continuous study of the subject under the direction of Dr. D. CUNNINGHAM.

The closing paragraph of the Committee's memorandum reiterates the convictions of the inutility of sanitary cordons and quarantine restrictions, which are also injurious by creating alarm and preventing the furtherance of valuable sanitary measures. The "notes" furnished by several members of the Committee form an interesting and valuable appendix. Thus, Dr. SANDERSON points out that our present

knowledge of cholera is not modified by these researches of KLEIN and GIBBES, which are inconsistent with KOCH's conclusions; nor do they bear on any practical question relating to the prevention of cholera. Dr. DE CHAUMONT thinks the facts sufficient to render KOCH's conclusions so doubtful as to set aside the notion that he had discovered the cause of cholera, but he doubts the value of any expression of opinion at the present time when only the fringe of the question has been entered upon. Dr. MARSTON, in an interesting analysis, puts the case very clearly, showing how inadequate the doctrine of KOCH is to explain many facts of the disease, and advances some arguments opposed to the contagionist theory which is bound up with the acceptance of the comma bacillus as the cause of cholera. Especially does he deprecate any diversion of public attention from essential sanitary measures through the premature adoption of ill-founded views. Surely no better instance of the wisdom of such precept could be cited than the recent epidemic in Spain afforded, showing as it did the public readiness to adopt a new remedy, even of so drastic a kind as inoculation, upon the slender basis of an unproved theory; whilst there was deplorable neglect of real preventive measures. The great divergencies of opinion and of observation, which the several inquiries into the relation of the comma bacillus to cholera have brought to light, serve at least to remind us of the complexity of the problems of that disease, and the difficulties that beset those who endeavour to solve them.

WRITING last year on the influence of small-pox hospitals on the neighbourhood which surrounded them, we referred to a concluding sentence of a series of articles on this subject by Dr. EDWARD WILSON, in which he stated that, if Mr. POWER'S arguments were well founded, "no small-pox hospital could under any circumstances be tolerated in the metropolis, and the arrangements recently made for the admission of fifty severe or seventy mixed cases to the Fulham and Hampstead Hospitals are not merely a blunder, but a crime." We characterised the arrangements which had been made as an experiment, differing only in magnitude from those which excite the strongest opposition from some morbidly sentimental English people; and we proceeded to point out that, in the face of the evidence which had been produced, the authority or authorities administering hospital provision for small-pox in the metropolis were incurring the gravest possible responsibility; that a trusted inspector of the Local Government Board had demonstrated the mischief caused by one of the small-pox hospitals, and that the medical officer of the Board had reported that he accepted the conclusions to which the inspector had come. We do not, therefore, profess to justify the experiment; it would, for obvious reasons, have been fortunate had the lessons contained in the report been more fully accepted, but, on the other hand, there is some consolation to be found in the fact that the opportunity which has been afforded for further investigation of the effects of aggregation of cases of small-pox has not been lost, and that Mr. POWER has been again entrusted with this duty.

Mr. POWER'S story, which is contained in the report of the Medical Officer of the Local Government Board, just issued is very similar to that which he had to tell on the previous occasion. His study of all the circumstances of the epidemic prevalence of small-pox in the parishes of Chelsea, Fulham, and Kensington shows that there has been an excessive incidence of small-pox in the houses in the neighbourhood of the hospital as compared with more distant houses, that the percentage of houses invaded has become gradually smaller as the distance from the hospital has increased, and that this has only taken place while the hospital is in use for the treatment of small-pox. Mr. POWER has, moreover, again found that the distribution of the disease has had no relation to the movements of persons passing to and from the hospital, but that houses on the chief lines of human intercourse have not suffered more than houses lying in other directions from the hospital.

This much the former report showed with sufficient certainty to satisfy the minds of all who could approach the subject without previous bias, and it will therefore be no new fact to such to be told that the distribution of small-pox cases in 1884 in these parishes was not different as regards their relation to the hospital from that of the cases of previous epidemics which occurred subsequently to the opening of the hospital. But the report has an additional interest even in these particulars, for during 1884, to prevent the hospital being a source of danger to the outside world through faults of ambulance or administrative services, or through visitors, precautions were taken by the hospital authorities which deserve the warmest recognition. The evidence, therefore, in favour of the view that the disease was disseminated through the atmosphere receives material confirmation by the experience of this year. It is indeed difficult to understand the grounds upon which any further unwillingness to accept it can be based.

But while Mr. POWER'S last report has substantiated in the strongest manner the correctness of his previous conclusions, he has brought out one new fact which must have a material influence upon the future of small-pox hospitals. He has found that the aggregation of a large number of cases of small-pox is not required to give origin to an outburst of small-pox in the neighbourhood, but that this can occur when the number of patients in the hospital does not actually exceed nine. This fact deserves to be considered in all its bearings upon the question of aerial dissemination of disease. If this had occurred at an advanced period of the epidemic, after numbers of other cases of small-pox had been conveyed through the streets, the conclusion would be less positive that this outburst had not some relation to the transit of patients or their visitors through the subsequently infected area; but it is noteworthy that "in a particular week, at the very commencement of hospital operations—at a time, that is, when hospital communications with the outer world were fewest, and when the amount of infection liable to be conveyed out of hospital by these or this sort of agencies was hardly greater than if a private house were in question—a marked or markedly graduated incidence of small-pox took place in the neighbourhood of the hospital." If the view is still to be entertained that these agencies are the cause of the special prevalence of disease in the area surrounding the hospital, the future of these institutions is indeed hopeless. If we are longer to believe that the conveyance of nine cases of small-pox through the streets, the

calling of two or three persons at the gate of the hospital and the movements of a few hospital servants can give rise to an outbreak in all directions from the hospital, there is no more prospect that such institutions can exist, and there is no alternative but to leave the sick in their own homes.

The masterly examination of every detail concerning this outbreak by Mr. POWER raises the hope that there may still be saved to our large towns the means of isolating persons suffering from this infectious malady. An essential part of the recommendations of the Royal Commission on Small-pox and Fever Hospitals was that "their construction should be such as to reduce within the smallest limits the chance of spreading infection"; and the suggestions of Dr. BURDON SANDERSON in this respect were directly indicated. As yet this recommendation does not appear to have received sufficient consideration at the hands of responsible authorities.

We understand that Mr. POWER'S report has been referred to a special committee of the Metropolitan Asylums Board; and the public will doubtless watch with much interest for the result of the consideration it will receive. Whatever conclusion is arrived at, it may be hoped that the authorities concerned in the administration of these institutions will regard it as their paramount duty to watch the effect of any alteration in the arrangements. The influence of these institutions upon the lives and health of the community, whether for good or evil, is too great to allow of further experiment being conducted without the most intimate regard for this consideration; and we therefore endorse the hope expressed by the Medical Officer of the Local Government Board that the time is not far distant when his department "may be entrusted with the study of this difficult problem of infection-diffusion in its relation to the metropolis generally."

IN any detailed analysis of mortality statistics the influence of occupation claims consideration on grounds little less important than does the influence of sex, of age, and of locality. The value, therefore, of the contribution to this department of vital statistics contained in Dr. WILLIAM OGLE'S Introduction to the Supplement to the Forty-fifth Annual Report of the Registrar-General, just issued, cannot well be overrated. Not only is the basis of observed facts bearing on the subject, now given to the public, unprecedentedly large, but an entirely new branch of the subject has been dealt with for the first time—that is, the cause-distribution of deaths of males in different occupations. Moreover, in an important respect these statistics may be accepted as a worthy model, especially for other official statistics. Dr. OGLE boldly and clearly points out the inherent defects of the materials with which he has had to deal, and the consequent necessity for considerable caution in drawing inferences from the death-rates in different industries. This frankness naturally invests with greater confidence, as regards trustworthiness, the deductions which Dr. OGLE feels himself justified in adopting and publishing from figures, of the true value of which he has the best possible means of judging.

Apart from the difficulties which stand in the way of obtaining thoroughly trustworthy mortality statistics relating to persons engaged in different occupations, must be constantly borne in mind the impossibility of separating the true effect of occupation from the effect of general sanitary condition, dependent so much upon the class or social position of those engaged in the various occupations. Dr. OGLE also points out that the variations in the death-rate in different occupations cannot be entirely attributed to the comparative healthiness of such occupations, since many occupations necessarily involve vigorous health as a condition of employment; failing health as necessarily implying the drifting into other and lighter branches of labour. Moreover, in many occupations it is the low and precarious wages, and the consequent poverty and severity of the struggle for existence, rather than the nature of the occupation itself, that cause the excessive mortality which stands out in such strong contrast with the mortality prevailing in more favourable occupations.

The earliest attempts in the direction of determining the healthiness of different occupations, including those of RAMAZZINI and THACKRAH, were based upon "general observation, unaided by exact recorded facts." More recently, calculations based upon the treacherous foundation of the mean age at death have been used for the same purpose; and bearing in mind the very small basis, even of this defective material, upon which many authors appear to have founded their deductions, it is not surprising to find that many previously accepted conclusions do not bear the light of more recent and sounder investigations. Dr. WILLIAM FARR was the first to construct tables of the varying rates of occupational mortality that had any claim to trustworthiness. These tables gave the death-rates of males engaged in different occupations, founded on facts derived respectively from Census enumeration and the national Death Register. In the Decennial Supplement relating to the decade 1851-60, the calculations were based upon the Census numbers in 1861 and the deaths in 1860 and 1861; in the Supplement for 1861-70, upon the Census numbers in 1871 and the deaths in the same year.

In the Supplement for 1871-80, just issued, Dr. OGLE'S tables and remarks are based upon the Census numbers in 1881 and the recorded deaths in the three years 1880, 1881, and 1882. As on previous occasions, the inquiry is limited to males, and on the present occasion to males aged upwards of fifteen years. When it is considered that the number of males of these ages enumerated in England and Wales in 1881 was nearly 8,000,000, and that the number of deaths dealt with was nearly 500,000, the extent of the basis of observation gives undoubted value to the results deduced by Dr. OGLE. With even this extent of basis, however, it was found impossible to obtain trustworthy rates for more than 100 different occupations or groups of occupations, and even this list includes a few relating to which the basis of observation fell somewhat below the limit which Dr. OGLE held to be really necessary for trustworthy rates—viz., the observation of 5000 years of life. The rates in these selected occupations have been calculated at five age periods, but for the purposes of comparison with the results of previous calculations for the years 1860-61-71 they are given for the two age periods 25-45 and 45-65, which include that portion of life upon which the effect of occupation may be held to be most marked. With reference to this comparison it is pointed out that in 65 of the 73 industries for which comparison is possible the death-rate in the period 25-45 had

fallen in 1880-82 below the mean rate in 1860-61-71; whereas in the later period, 45-65, the rate shows an increase in 1880-82 in 38 industries, having declined in but 35. These changes are in general accord with those recorded in the death-rates of all males.

The death-rates among persons at all ages engaged in different occupations are not comparable without due correction for the varying ages of the workmen. To obviate this difficulty Dr. OGLE introduces what he calls a "comparative mortality figure" to serve as a convenient and yet trustworthy numerical test of the mortality in different occupations, with due correction for age distribution—1000 being taken to represent the mortality of all males in England and Wales in the three years of observation, 1880-82. To furnish other standards of comparison with the "comparative mortality figure" for the several occupations or groups of occupations, it is shown that the figure for all males in certain selected healthy districts is 804, of all occupied males 967, and of all unoccupied males 2182. Judged by these comparative mortality figures, the group of clergyman, priest, and minister heads the list with the low figure of 556; the nearest approach to this being gardener and nurseryman, 599; farmer and grazier, 631; and labourer in agricultural counties, 701. The figures for the other occupations, or groups of occupations, increase rapidly, and at the bottom of the list appear the following: Plumber, painter, and glazier, 1202; cutler and scissors-maker, 1309; musician and music-master, 1314; hairdresser, 1327; cab and omnibus service, 1482; chimney-sweep, 1519; innkeeper and publican, and wine and spirit dealer, 1521; messenger, porter, and watchman, 1565; filemaker, 1667; earthenware manufacturer, 1742; Cornish miner, 1839; costermonger, hawker, and street-seller, 1879; general labourer in London, 2020; and inn and hotel servants 2205. Compared with the clerical, the legal and medical professions appear in a far less favourable light: the mortality figures for barristers and solicitors is 842, and for physicians, surgeons, and general practitioners so high as 1122, against 556 only in the clerical profession. This high rate of mortality in the medical profession is a subject calling for our fullest consideration and investigation, and we are glad to hear that there is a prospect of Dr. OGLE's reading a paper thereon before the Medical and Chirurgical Society during the current session.

In order to throw light upon the causation of these varying death-rates, a large proportion of the death registers for the three years 1880-1-2 were examined, and a considerable number of the causes of death in each industry were abstracted, to serve as a sample for distributing the total mortality of the industry in the proportion shown by the sample. For the purposes of this process, Dr. OGLE appears to have considered 500 as the minimum number of deaths that should be accepted as a sample of the causation of deaths in an industry. With regard to several of the occupations in the selected list this minimum was not reached, and the rates from the several diseases were not calculated; in most instances, however, the minimum was considerably exceeded.

It is impossible here to do more than indicate one or two of the directions in which Dr. OGLE's method throws valuable, because indisputable, light upon the way in which different occupations affect the varying mortality from all causes to which we have briefly referred. We have seen that innkeepers and publicans suffer from excessive mortality, causing a mortality figure of 1521 against 1000 for all males. On looking at the causes of death, we find that of this mortality figure 55 is due to alcoholism and 240 to liver diseases, whereas the respective figures for all males are only 10 and 39. The other diseases showing the marked effect of drink among innkeepers and publicans are gout and diseases of the urinary system. The mortality figure for gout among drink purveyors is more than four times that for all males; and the figure for diseases of the respiratory system is 83 instead of 41 for all males. Next to publicans and innkeepers, but a long way off as regards evidence of drink mischief, come brewers, butchers, commercial travellers, cab and omnibus servants, and grocers. Remarkably excessive mortality figures for diseases of the urinary system among file-makers and plumbers and painters are pointed out as evidence of the lead-poisoning which is incidental to both occupations. The variations in the mortality figures for phthisis in different occupations are full of interest, and susceptible of practical hygienic application. The mortality figure for phthisis among all males is 220, but among the different occupations it ranges from 103 among farmers and graziers, 108 among fishermen, 121 among gardeners and nurserymen, and 122 among labourers in agricultural counties, to 433 among file-makers, 461 among printers, 473 among earthenware manufacturers, 473 among costermongers and hawkers, and 690 among miners in Cornwall. Thus, while the mortality from phthisis is lowest amongst those labouring in the open and purer air, it is mainly highest among those labouring in an atmosphere laden with solid or other impurities. Dr. OGLE calls especial attention to two points in connexion with his phthisis figures. The traditionally supposed immunity of butchers from the disease is not corroborated by his investigations. On the other hand, his figures lend undoubted support to the remarkable and unexplained low death-rate from phthisis that prevails among coal-miners, in spite of their occupation being carried on in an atmosphere for the most part impure and dust-laden. The mortality figures for coal-miners in different parts of the country, both for all causes and for phthisis and other diseases of the respiratory organs, are in strikingly favourable contrast with those for the miners (principally of tin and copper) in Cornwall.

Among the many interesting facts resulting from Dr. OGLE's investigations we can only refer to one other, bearing upon the high death-rate among chimney-sweepers, whose mortality figure is 1519; of this mortality figure no less than 202 is due to cancer, while the figure for this disease among all males is only 36. The causation of excessive occupational mortality is as important as it is interesting, and we are glad to note Dr. OGLE's concluding expression of a "hope that the experience which has been gained in this first attempt may render it possible, when the next Decennial Supplement comes to be undertaken, to conduct a similar inquiry upon a wider basis and for a larger number of industries."

THE Medical Defence Association has taken up with great promptitude the case of Dr. COLLIE; and the fact that the

leading journal of Monday last published their report on the case is proof that outside as well as inside the profession Dr. COLLIE has earnest friends and defenders. He deserves the support. His position is one of extreme hardship. For fourteen years he carried out the duties of medical superintendent of the Homerton Hospital not only without exciting any complaint on the part of the managers of the Asylums Board, whose officer he was, but often with the enthusiastic admiration of the Board. He was felt by the members to be a man of determined and resolute energy, and of his powers, mental and physical, they availed themselves to the top of their bent. When another member of the profession, whose name now stands at the head of the defence of their officer, once ventured, as president of a meeting of the Sanitary Institute, to question some of the more important principles connected with the management of the Board, Dr. COLLIE was the champion whom they relied on to resist the attack; when they wanted sites for new hospitals, he was their inspector; when they wished for plans for a staff, he was their adviser; when they desired to organise an ambulance system for the conveyance of the infected sick from their land hospitals to their ship hospitals, he was their right hand. Meanwhile his own proper duties were of a kind to tax the powers of a Hercules in medicine, the marvel on all sides being how one man could by any human possibility get through the anxiety and the labour. At last there came a reverse. The policy of the Board, to use a term now of common application, was challenged. Extravagance was discovered, and we do not wonder at the discovery. The discovery led, as it was sure to lead, to sensation, sensation led to inquiry, and inquiry led to cowardice on the one hand and injustice on the other. Instead of standing like men for the protection of their overtaxed officer, this Board laid on his shoulders all the discovered offences; and, not content with that, suspended him from office for eight months on what really is the mere technical argument that he could not from sheer overwork carry out certain clerical duties which never ought to have been inflicted on him. In plain words, it is proposed to make him the victim for exonerating a bad system from public chastisement. We can scarcely believe that the Asylums Board itself will be so wantonly unjust as to dismiss Dr. COLLIE from office. It is not to their own credit to do so, and cannot be to their ultimate advantage. The public mind is not slow to see through false movements and false shelterings, while it is quick enough to detect and resent great wrongs and workings of injustice. But whatever the Asylums Board may do, we feel sure that the power which overrules them, the Local Government Board, will be just in this matter. The Local Government Board, which must be conversant and is conversant, with the important public services rendered by Dr. COLLIE, which has itself asserted the efficiency of the performance of his medical duties, which after due inquiry has made no criticism on his integrity, will not certainly support his dismissal because during periods when every nerve was strained to meet professional emergencies of the most solemn character, when rest by day and sleep by night were all but impossible, he failed to carry out clerical duties which, to a mind so occupied with overwhelming details relating to life and death, would naturally fall into the list of duties demanding, under the pressure, either to be omitted or to be deputed to other hands.

The case is one which the profession generally ought to take up. It touches every part of the body medical. Ready to obey the public will in all difficulties for which we are required, we must at the same time insist on being considered as something more than the mere slaves of public bodies, and any attempt to treat even a single member of our fraternity with such unmerited dishonour ought to call forth a reply that will not readily be forgotten.

Annotations.

"Ne quid nimis."

MEDICAL MEN AND LAWYERS IN THE COMING PARLIAMENT.

IT is estimated that nearly 200 lawyers are seeking election to Parliament. "Nearly every Queen's counsel of eminence," says the *St. James's Gazette*, "(except of course those who practise before parliamentary committees) is seeking election." The number of medical men that are so occupied would scarcely exceed that of the fingers of one hand. Can it be for the good of the State that so many of a profession already over-represented and so few of one wofully under-represented should seek admission to that House of Parliament which alone medical men can enter? We cannot hope to make every partisan understand the important reasons for a goodly number of medical men in Parliament, as men better informed of the social and sanitary aspects of life and the deepest wants of the people than any other class can be. But we appeal with some confidence to all reasonable men on this subject. Medical electors who have the chance of voting for honourable members of our profession may well surely think twice before they refuse to do so. The questions about which partisans fight are as nothing compared with those for which educated medical men would strive. Next week will give the public and the profession the chance of electing a very few such men. Let not the chance be lost. Mr. Erichsen is making a good fight for the representation of two of the Scottish universities. Dr. Lyons is well entitled to be returned for one of the divisions of Dublin. Dr. Forster has very clear views of medical reform, and promises to win in Chester. Dr. Farquharson and Dr. Cameron may both expect to reappear in the new Parliament. But we urge on the members of the profession to use their great influence for the return of medical men.

THE HOUSING OF THE POOR IN RURAL DISTRICTS.

IN his annual report on the combined sanitary district of West Sussex, Dr. C. Kelly deals at some length with one aspect of the question of the proper housing of the poor in rural districts. With him overcrowding is not so much a matter of cubic space as of knowing how to deal with the overcrowded family. At all times, he alleges, the family of the agricultural labourer are on the verge of poverty, and it is only by reason of much economy that both ends are made to meet; and when overcrowding is detected in such a household, an impossibility is asked when the labourer is told he must get a larger house. On the estates of large landowners in West Sussex the dwelling accommodation is as a rule good; the tenants work on the estate, and they have in their garden allotments and their pig a substantial aid to comfortable existence. But such landowners will not build or supply cottages for other than their own workmen. According to the report, each cottage for a family should have three bedrooms—one for the parents, one for the boys,

and one for the girls. Each inmate should have at least 250 cubic feet of air, so that a bedroom 10ft. by 10ft. by 7½ ft. would contain 750 cubic feet, or room for either three children, or two adults and a child. But it is stated that in the district in question a double cottage so built would cost £350, so that the owner should receive £17 10s. a year for the two tenements in order to obtain 5 per cent. on the capital laid out; but since this sum would also have to cover repairs, rates, and taxes, the interest would in truth be reduced to some 4 per cent. But even this would amount to a rental of about 3s. 4d. a week for each cottage, whereas there are but few labourers who can afford to pay more than 2s., or at the outside 2s. 6d., a week for rent; and it is certain that no ordinary person would care to build if he knew he would get less than 4 per cent. on his outlay. And what is the result of this state of affairs? There is hardly a village, says Dr. Kelly, in which there is really sufficient accommodation for the poor, and there is no apparent intention on the part of anyone to supply the want; and, having regard to all the difficulties, he is of opinion that overcrowding in rural districts will not cease until a man can afford a higher rent by receiving a higher wage. Unfortunately this brings us face to face with the greatest of all difficulties, for it is said that land cannot be made to pay the higher wages.

HOT-AIR BATHS AT HOME.

THE lamentable death of Dr. Carpenter, by accident in connexion with the use of a hot-air bath at home, has not unnaturally given rise to a great deal of uneasiness in the minds of patients and their friends in cases where these really valuable appliances have been recommended. It is perfectly natural that apprehension should be aroused, and it is well that an incentive to carefulness should be supplied; but it must not be forgotten that Dr. Carpenter's death was entirely due to an altogether irregular procedure. The safety lamp of his bath being out of order, he extemporised a lamp with common spirit in a gallipot. Nothing could have been more dangerous. In short, the "accident" has no sort of rational relation to the use or misuse of the bath proper. It will, however, be worth while to embrace the opportunity offered for a few words of counsel as to these hot-air baths, which, as a matter of fact, are seldom satisfactorily administered. If we may venture to be dogmatic as well as didactic, it must be said that we have always entertained a strong objection to that form of the bath which involves the patient being in an erect or sitting posture. The hot-air bath is not like a vapour bath. It is not used for the purpose of applying medicaments to the skin, but to produce perspiration, and it is always possible that some amount of faintness or giddiness may be experienced by the bather even when the blanket or tent-shaped envelope is so effectively applied as to prevent the fumes rising to the mouth and being inspired. It is always far better, and we think ought to be a rule, that the patient should be in the recumbent position. With a properly constructed cradle-head the bedclothes can be raised and the lamp placed safely in the bed itself, the clothes being well tucked in round the neck and under the chin, so that nothing may reach the mouth. In this way the patient may enjoy the full benefit of a fairly high temperature without the least fear of faintness. There are, nevertheless, certain precautions which ought to be observed, and which are too commonly overlooked. 1. A thermometer with a long stem ought to be so placed that the bulb may be inside the clothes and the indicator-column visible outside. Such a thermometer might with advantage be supplied with the bath. It is always desirable to know the temperature of the atmosphere to which the patient is subjected. 2. The moment perspiration is induced there arises the question—How far ought it to be carried? If the purpose of the bath be to eliminate fluid or any product of tissue-waste from the body, there may be a need for the maintenance of the cutaneous perspiration for some time; but otherwise it is not, generally speaking, well to let the patient remain in the heat for more than ten minutes; otherwise, the result can only be to saturate the bedclothes with moisture, which will begin to cool as soon as the lamp is removed, and after the lapse of twenty minutes or half an hour must place the patient in the perilous position of lying, perhaps sleeping, in a damp bed! We have seen cases in which more harm than good has been done by the neglect of obvious precautions in this respect. A hot-air bath for ordinary purposes is better given in the morning than at night; or, if that be impossible, the patient should be removed to a dry bed with hot blankets. The body-heat can never be safely trusted to keep the clothes, which have been saturated with moisture by a bath, warm after the lamp is withdrawn. It is quite a different matter when the perspiration has been raised by the heat of the body itself. As a rule, the patient should be removed and wiped dry in about twenty minutes after the withdrawal of the lamp—that is, in half an hour from the commencement of the bath. If the perspiration be acid, it is desirable to sponge the surface with hot water, in which about a dessertspoonful of carbonate of soda has been dissolved—say, in a quart of water. 3. If the case be one of rheumatism or gout, it must be recognised that by determining to the skin we are likely to get *increased* stiffness and surface irritation after each bath until the excrementitious material has been thoroughly eliminated. Overlooking this fact, patients, and sometimes practitioners, fail to persevere long enough, with the baths, because, as it seems, each bath makes matters worse. These are but a few of the general points worth noticing, but they may suffice to suggest others.

IMPORTANT DECISION UNDER THE FOOD AND DRUGS ACT.

A CASE has just been decided in the Court of Queen's Bench which will make convictions as to the adulteration of milk more difficult than ever. The case, which will be known as Kirk *v.* Coates, was as follows. A vendor of milk in Huddersfield had in his cart a number of milk-cans, and when asked by Kirk, the sanitary inspector for the borough, what they contained, he explained that some contained new milk and others old milk, the latter being a term locally applied to milk which had stood twelve hours, and from which the cream had been abstracted. The inspector, keeping in view a can which had been stated to contain "new milk," called his assistant, who brought two bottles in which to take samples for analysis, and asked for a supply from the can in question. But then, according to the appellant, Coates altered his statement, and, declaring that the can contained "old milk," he only took from the inspector the price of the inferior article, which on analysis was found to have been impoverished by the removal of at least 52 per cent. of the butter-fat. The contention before the justices was that the respondent having once declared the milk to be new, could not, on finding that it was required for analysis, evade the statute by disclosing its real character, even though the disclosure might be made before the sale was effected; but the justices decided otherwise, stating, at the same time, a case for the opinion of the Court of Queen's Bench. The real question at issue was whether the respondent had succeeded in evading the statute, for he did not even appear in order to deny the statements which were made by the sanitary inspector. Mr. Justice A. L. Smith said that possibly the respondent would have cheated if he had been able to do so, but he had not

done so; and this view was evidently that held by the court, for Mr. Justice Manisty, in giving judgment, said the magistrates had rightly decided that there had been no sale of milk by the respondent except as "old milk." The decision is extremely unfortunate, for it will now be understood that when notice is given to a vendor that the article being purchased is procured for the purposes of analysis, he can at once evade the Act by declaring it to be adulterated. The Act was understood to have been passed for the purpose of protecting the public against adulterated articles; but all it will now do, under similar circumstances to those which existed at Huddersfield, will be to save the borough officials from the trouble of attempting to secure convictions whenever the vendors choose to evade the Act as the respondent appears to have done in this case.

DOUBLE PULMONARY CIRRHOSIS.

AT the first annual meeting of the Fifth District Branch of the New York State Medical Association, Dr. Wm. McCollom read the report of what he called "a unique case of uniformly developed cirrhosis of the lungs." The case during life was obscure, and the principal symptom was progressive dyspnœa. The only abnormal physical sign was the existence of sub-crepitant râles on both sides, which one observer attributed to extensive pleuritic adhesions. The kidneys were entirely healthy; the liver was, perhaps, slightly fatty, but healthy. The pericardium contained about two ounces of fluid, and the right ventricle was slightly dilated; otherwise the heart was perfectly healthy. The lungs were of a dark grey or brown colour, and floated freely in water. The parenchymatous tissue of both lungs was very hard and dense, and creaked under the knife. There was no evidence of acute pneumonia, and no cavities were found. The only adhesions were two slight ones at the apex, and they were evidently of long standing. Professor Flint made some interesting remarks on this important case. He examined the case during life and discovered nothing but râles; he felt sure the patient had kidney disease, till this was disproved by an examination of the urine. The remarkable point in the case was the equal development of the cirrhosis in both lungs, it being almost invariable to find one lung much more affected than the other.

CONDITION OF CLERKENWELL.

AN inquiry was held last week into the sanitary condition of Clerkenwell by Mr. D. Cubitt Nicholls, acting under the instruction of the Home Secretary, who had ordered the inquiry in compliance with the recommendation of the Royal Commission on the Housing of the Working Classes. Two members of the local authority (the Clerkenwell vestry) were associated with Mr. Nicholls; and while Mr. Philbrick, Q.C., represented the vestry, Mr. Lewes Thomas, the executive officer of the Mansion House Council, put before the inspector the case of those who desired to see better sanitary administration in the parish. A long list of insanitary dwellings and defects was quoted by Mr. Thomas as reason for the requirement of a larger sanitary staff. He also pleaded for the supply of waterclosets, with water-supply and with suitable apparatus, and quoted the statutes under which this could be enforced. The advantages of a constant water-supply, both in securing a sufficiency of water as well as freedom from pollution, were dwelt upon, and the insufficiency of the water-closet accommodation in proportion to the number of inhabitants in many houses was pointed out. Mr. Philbrick, in reply, contended that the parish was in fair sanitary condition, and that the staff was adequate to its requirements. There can be no manner of doubt that this inquiry will do good, and with care might be turned to useful account by a medical officer of health who desired to have his hands strengthened. Such inquiries, if extended, will probably be especially useful in enabling some comparison to be made between the standard of excellence aimed at by different parishes, and in inciting to better work those whose sanitary administration is most lax. The ground covered by the inquiry was somewhat restricted, some important considerations of a medical character not being placed before the inspector. The report of the inspector will be forwarded to the Home Secretary.

THE INTERNATIONAL MEDICAL CONGRESS.

THE appointment of an executive committee independent of any Association is expected to give every chance of success to the International Medical Congress. We devoutly hope that it may be so. Impartial men think that if the profession in Europe only determine to attend the Congress all will go on smoothly. It may be accepted as certain by our American brethren that we look with the deepest interest on the progress of the negotiations for holding the Congress, and that we are most anxious for their success. Any breach in the continuity of the series of Congresses would be a misfortune for the medical profession of the whole world, and would constitute a heavy responsibility for the particular country which occasioned it. A practical and hospitable nation like that of the United States is not likely to set the example of failure in a cause so great and hitherto so continuously successful.

FEAR AND HYDROPHOBIA.

IT is well recognised that fear or nervous apprehension can induce a fatal disease having nearly, if not all, the characters of hydrophobia. But it is not true to assert that hydrophobia is always brought on by the mental anxiety that a dog-bite not infrequently occasions. We make these plain assertions because some of our weekly contemporaries have thought fit to regard the "hydrophobic panic," as they call it, as unwarranted and mischievous in its working. Certainly anything like a *panic* is to be repressed, and on no occasion in life can a "panic" benefit, though it may harm, a community. Hydrophobia is a nervous disease, but it has a material cause, a poison, which is most likely a "germ" or micro-organism. It is a curious fact that birds, even when inoculated with the poison of rabies, do not suffer from the disease. We have frequently mentioned the fact that some individuals appear to enjoy, with birds and other animals, the same kind of immunity. Whether it is those persons who are not given to fear or nervous apprehension who always escape hydrophobia, even though bitten by a rabid dog, we are not in a position to state. But nothing can be more detrimental to a bitten individual than to brood over his misfortune, or make himself miserable by learning all the symptoms of hydrophobia.

THE EAST WIND.

WE all know how the dry east wind absorbs the moisture of the residual air in the lung, inspissating the normal secretion of the bronchial tubes, and probably arresting by this mechanical process the action of the cilia of the epithelium, so that they no longer wave towards the outlet. This anti-physiological process may be the first stage in the development of a pathological state. There is, however, another mischievous effect of the east wind to which attention needs to be directed, and of which we have recently seen some notable examples. The practitioners of the early portion of the last century were a good deal troubled by a special peril affecting the "fops" of their day. These young gentlemen carried muffs, which hung down from the waist to the knees and kept the abdomen warm. When they were forgotten or

diseased for any reason in cold weather the east wind produced a sudden chill of the body, and cases of enteric congestion, or even in some instances of peritonitis, were numerous in consequence. This cause of trouble from "chill" no longer exists, but there is generally a prevalence of gastric and intestinal affections during the cold weather produced by the east wind. A brisk walk or drive against this wind is often followed by pain, with diarrhœa or constipation alternatively. If strict inquiry be made when no other cause is apparent, it will often be found that this is the mode of occurrence of the congestion or inflammation which characterises the class of cases to which we allude.

NITRO-GLYCERINE AS A POISON.

WE understand that the question of placing nitro-glycerine and its preparations under the restrictions of the Poisons Act has for some time past engaged the attention of the authorities at the Home Office. Cases of poisoning by nitro-glycerine are fortunately as yet somewhat uncommon, but it is well-known that it is a powerful toxic agent, and that it should be administered with the greatest care, and only under medical supervision. Since the introduction of nitro-glycerine tablets into the British Pharmacopœia the use of the drug has increased to an enormous extent, and it is to be feared that its manufacture is carried on surreptitiously, not only in the country, but even in London itself. As a matter of principle, we are not in favour of legislating for any one particular remedy, or class of remedies, but there are exceptions to all rules, and if the authorities persistently close their eyes to a pressing danger they incur a grave responsibility. Should an explosion attended with loss of life occur from the manufacture of nitro-glycerine in a chemist's shop, something will in all probability be done, but until then things will be allowed to drift on unchecked and unheeded.

OPTIC NEURITIS IN KHARKOFF.

FROM a paper by Dr. Schmidt, in the October number of the *Russian Ophthalmic News*, we learn that during the last thirteen years the number of patients with optic neuritis seen in Professor Hirschman's ophthalmic clinic in Kharkoff has been 279, these cases forming 4 per cent. of the whole. The majority were male patients. Generally both eyes were affected, the disease being confined to one eye in 31 cases only. By far the largest proportion occurred in patients of from twenty to forty years of age. The ophthalmoscope showed that 180 were cases of papillitis, 82 of papillo-neuritis, and 17 of neuritis retrobulbaris. Most of them were due to syphilis, and were accompanied by internal syphilitic affections, kidney disease, emaciation, &c. The cause of the disease could not in many cases, however, be clearly made out. The result was usually more or less complete atrophy, the cases of improvement being less numerous and those of cure least of all so.

NEPHROTOMY FOR TOTAL SUPPRESSION OF URINE.

THE patient on whom Mr. Clement Lucas operated for total suppression of urine lasting four days and six hours, and whose case was mentioned in THE LANCET of Nov. 7th, is progressing favourably and gradually gaining strength. During the first week no urine was passed per urethram, nor did any collect in the bladder, and it began to be questioned whether there might not be another calculus impacted in some lower part of the ureter. As this is the first time the operation has been performed for total suppression of urine, there was no experience to indicate how long the ureter might cease to act, after a large opening had been made in the pelvis of the kidney for the purpose of extracting a stone. All doubts, however, were dispelled on the twelfth day, when the patient passed about two ounces and a half of urine by the natural passage. Since then the quantity naturally expelled has gradually increased. The wound healed primarily except where the drainage-tube is inserted, and the patient's temperature has remained low. The patient in Mr. Lucas's case of nephrectomy, performed on Oct. 20th, left the hospital well just three weeks from the date of the operation.

RIVER POLLUTION.

THE Executive Council to secure effective legislation against river pollution have issued an appeal, in which they urge electors to press this question upon all candidates for membership of Parliament. We fully sympathise with the desire of those who are demanding further legislative possibilities for ensuring the freedom of rivers from pollution, and hope that this much-needed and long-delayed measure may have some prospect of being dealt with in the next Parliament. A few weeks will serve to show whether the party which comes into office will have a sufficient majority to ensure the business of the House being conducted without the interminable delays which characterised the proceedings of the last Parliament.

EFFECTS OF BRIGHTNESS AND COLOURS ON VISION.

A RUSSIAN observer, Dr. Kolbe, having made some researches on the effects of various degrees of brightness and of coloured paper on the acuteness of vision, using for the purpose Snellen's tables, has come to the conclusion that acuteness of vision increases with the difference in brightness between an object and the ground upon which it is placed, but that this increase is not proportional to the difference, augmenting rapidly as long as the difference of brightness is small, then augmenting very slowly until a great difference in brightness is reached, when it again augments very remarkably. He also finds that the colour of the ground, unless it is very intense, has little effect on the acuteness of vision. With regard to the fatigue occasioned to the eyes by paper of various colours, he finds that red and green papers produce more fatigue than blue and yellow, and these again more than grey and white of the same degrees of brightness. Altogether he does not think that a coloured paper for printed books presents any advantage, as far as the eyesight is concerned, over white paper.

FRIGHT.

A CLERGYMAN has just been committed to prison for seven days as a penalty for striking a constable. The assailant was coming out of his house when the policeman, who happened to be waiting to serve a summons, laid the document on his arm. His reverence exclaimed "You brute, how you did frighten me," and struck the constable a violent blow in the face with a candlestick. We have nothing to say as to the merits or demerits of this particular case, but it should not be forgotten that in many instances the immediate effect of a "fright" is to make the person startled strike out with anything at hand. Some persons are paralysed by panic, others are instantly roused to action in a way that does not involve volition. The blow is as much the result of the excitation as the knee-jerk produced by striking the patellar tendon, albeit the train of actions is more complex, and involves the exercise of that co-ordinative faculty which has been called the sub-consciousness. In stumbling we make certain movements with the feet, and clutch at anything that may be within reach in a manner designed to prevent or minimise the effect of a fall. A good horseman will, "instinctively," as we say, take such precautions as will prevent his being

hurt by a fall. The will is not *intentionally* active in these processes. The recognition of the danger and the adoption of suitable measures seem to occupy too short a time for *thought*, but experience is called into operation, and the judgment is exercised. There is, however, in all such acts, obedience to impulse, and we are quite prepared to believe that a man startled may strike the person startling him without any intention to "assault."

WINTER RESORTS.

THERE are doubtless places of sojourn for the winter in England as good as those to be found on the Continent; but they do not, as a rule, lie on the coast. Great disappointment ensues in many cases when patients are sent to watering-places such as Torquay, Bournemouth, &c., during the cold weather. Although theoretically these places are sheltered from the east wind, they are in fact extremely cold, and not a few of the lung cripples recommended to resort to them find to their cost that the conditions of existence through the winter are rendered not less difficult than in towns. The sick and weakly would be better advised to seek refuge inland. It is a fortunate fact that Bath is again becoming "fashionable"; but there are many other places—such as Clifton, Cheltenham, Buxton, Leamington, and some of the inland places in Cornwall—which are incomparably better adapted for winter residences than the places of resort on the coast.

EDINBURGH AND ST. ANDREWS UNIVERSITIES.

THE nomination of candidates for these universities may take place early next week, and the voting papers will be issued to the electors soon after. They will be sent out by post from the universities by the registrar, with a proposed letter of directions by him; and it is of the utmost consequence that each voter should carefully follow the instructions, and return his voting paper as soon as possible duly filled up to the registrar, to be kept by him till the poll begins.

THE POVERTY OF LONDON HOSPITALS.

A CORRESPONDENT in the *Globe* pleads piteously and powerfully for more generous support of the London hospitals. The case is urgent. But the moment is not very opportune for getting public attention. We shall refer to the subject again at a time when men begin to think more of helping their fellow-creatures and less of gaining a political advantage over them.

CHOLERA IMPORTED BY REAPERS.

THE cholera was imported into the town of Monteagudo, according to the *Independencia Médica*, by a party of reapers who came from Arragon. One of these was seized with cholera at the gate of one of the houses of the town, and vomited over some pitchers which were used (after being washed) for drawing water from the public well, having to be let down into the well for the purpose. In this way the well became a centre of infection, and in a very few days a violent "explosion" of cholera occurred, no less than 800 persons being attacked, 265 of whom died.

OPTIC NEURITIS IN CHILDREN.

THE object of a note by Dr. R. Saundby in the current number of the *Birmingham Medical Review* on the presence of optic neuritis in children is to draw attention to the possibility of the occurrence of double optic neuritis not depending on coarse intracranial disease, or morbus Brightii. Two cases of optic neuritis are recorded, in both of which the patient was hypermetropic, and in neither was there any certain reasons to suspect cerebral mischief or Bright's disease as the cause. Reference is made to the suggestion of Dr. Gowers that hypermetropic eyes are specially liable to suffer from optic neuritis. Unquestionably the subject is one of considerable interest, and not solely to neural pathologists. Dr. Gowers has pointed out the occurrence of optic neuritis in at least two diseases which are not unfrequently regarded as of functional order—chorea and anæmia.

MEDICAL DEPARTMENT OF THE SERVIAN ARMY.

A NOTICE is published in the Vienna medical press stating that several second class military surgeons are required for the Servian army. Candidates must have the Austrian doctor's diploma of medicine, surgery, and midwifery, and preference will be given to such as speak Servian or some Slavonic language. The yearly pay is about 3200 francs.

IN the Court of Appeal, on the 17th inst., before Sir James Hannen and Lords Justices Bowen and Fry, an application was made on behalf of Dr. Dowse, of Welbeck-street, by way of appeal from the refusal of Vice-Chancellor Bacon to restrain Messrs. Battle and Co., of Southampton-row, from publishing and circulating, in connexion with their advertisement of a preparation named "Bromidia," a letter written by the plaintiff speaking in terms of high praise of the preparation as a most valuable hypnotic and sedative. It having been admitted that the plaintiff had not, before issuing the writ in the action, applied to the defendants to discontinue the advertisement, their lordships refused the application.

PREVIOUS to the trial of Mr. Trestrail of Aldershot, whose honourable acquittal we recorded in our last issue, a memorial was extensively signed by ladies residing in the neighbourhood expressing their high appreciation of the professional services rendered by the accused to the people of Aldershot. We are pleased to learn that during the time that elapsed since the hearing of the case before the magistrates, Mr. Trestrail's practice has not fallen off by a single patient, and that the high confidence reposed in him has remained absolutely unimpaired, the general opinion of the people of Aldershot being one of entire sympathy and confidence.

AT the next meeting of the Royal Medical and Chirurgical Society on the 24th inst., Mr. Barker's paper on the Distribution of Bacillus Anthracis in the Human Skin in Malignant Pustule will be read, and also one by Dr. John Harley on a case of Tubercle of the Liver, in which the appearances of Actinomycosis are presented. In this paper the question is raised as to the reality of the so-called actinomycosis.

SEVERAL medical men have recently been promoted to the various grades of the order of Leopold, Professor Hairon of Louvain being created Commander, and MM. Borlée, Gille, and Van Meldert of Brussels, and M. Kuborn of Seraing, Officers. Besides these, quite a long list of medical appointments to the rank of Chevalier is announced,

ON Nov. 11th Mr. H. E. Clark, of the Glasgow Royal Infirmary, ligatured the common carotid artery for "pulsating exophthalmos." At the first dressing, five days after, the wound was found healed by first intention, the local œdema had much diminished, and the pulsation had stopped.

AT the last meeting of the Warsaw Medical Society, Dr. Phlorkevich read an important communication describing two cases of actinomycosis he had met with in private practice in a woman of thirty-six and a lad of seventeen.

CHOLERA ON BOARD FRENCH TRANSPORTS AND IN FRANCE.

WE have received from Alexandria an account of the circumstances attending the serious outbreak of cholera on board the French transport *Château Yquem*. The vessel left the Bay of Along, in Tonquin, on Aug. 14th, after having taken on board some 225 passengers, mostly sick or convalescent soldiers. The next day cholera broke out, and by the time the vessel reached Singapore on Aug. 20th, eight deaths had taken place. An attempt was then made to fit up a lazaret on the island of Poulo-Condor, but during this interval the epidemic was extending on board. On Sept. 6th the passengers were all put on shore, and disinfection of the vessel was commenced. From Sept. 4th to the 15th no fresh case of cholera occurred, but between the 15th and the 19th two cases took place on shore and one on board, two of them terminating fatally. Here the epidemic is reported as having ceased. On the 28th the transport again left for Singapore, arriving there on the 30th, when the period of quarantine had expired, and the voyage to Aden was commenced the next day. At Aden a detention of thirty-six hours took place, and Suez was reached on Oct. 27th—that is to say, two months and fourteen days after leaving Tonquin. At this date thirty-eight cholera deaths were reported, measures of disinfection, and of burning of clothes, bedding, &c., having been carried out. The Suez authorities, although there had been no cholera on board since Sept. 19th, at once ordered the vessel to the Tor quarantine depôt, the vessel to be detained there for seven days before being allowed to enter the canal on her way to France. The French have so persistently called for the imposition of quarantine measures on British vessels that they had the good grace to submit without having recourse to any appeal. They are, however, keeping information on the subject as close as they can.

We also learn that another French transport, the *Nive*, left Tonquin on Sept. 22nd, and amongst her 606 crew and passengers there were thirty convalescents from cholera. The *Nive* reached Saigon on Sept. 26th, and during the brief passage there had been eight deaths, two admittedly due to cholera, and six being entered as diarrhœa and dysentery. After performing ten days' quarantine, during which time one case of "cholerine" was landed, the vessel left Saigon for Suez on Oct. 11th, with an increased number of troops and convalescents. During the voyage to Suez two more deaths occurred, one being put down to diarrhœa, the other to remittent fever. On arrival at Suez on Nov. 1st, the vessel was repulsed to Tor to perform seven days' quarantine before being allowed to pass the canal, even though the transit should be effected "in quarantine"—that is to say, without communication with the shore.

These two cases are not the only ones of a similar sort that have occurred, and it is evident that the French, who have hitherto maintained that the danger of cholera to Europe must always centre in British India, will soon have to admit that their own eastern colonies are in the main to blame; and it yet remains to be seen how far the quarantine measures in the Red Sea, and which the French have themselves so persistently advocated, will be found to suffice for the protection of the insanitary southern ports of France; or whether, as in 1884, the disease will succeed in evading all restrictions, and reach France by means of her transports. The case of the *Château Yquem* is one of special interest, as showing how cholera will at times continue to extend during a sea voyage, and this even on board a military transport ship, where sanitary arrangements receive, or are at least supposed to receive, special attention.

In the meantime the interest which attaches to European cholera once again centres in France. The disease has been extending in Brittany, and the towns of Quimper, Concarneau, and Le Guilvinec are specially reported as infected. Fresh cases are also occurring in the Naval Hospital at Brest. So also in the forty-eight hours, Nov. 14th to 16th, a further outbreak, as yet limited, is reported from Prades in the Department of Pyrenées Orientales. The disease is therefore still prevalent at both extremes of France.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT an extraordinary meeting of the Council, held on Tuesday, November 17th, the minutes of the last meeting were read and confirmed.

The statement to be submitted at the next meeting of Fellows and Members, which had been drawn up by the President and Vice-Presidents, was considered, approved, and adopted, and will be brought before the Council at an extraordinary meeting to be held on the 24th of this month for confirmation.

The question of the report of the delegates to the Royal College of Physicians on the title of Doctor was postponed until the 24th inst.

The sum of £50 was voted by the Council as a donation to Holy Trinity Church, Little Queen-street.

The discussion on Mr. Hutchinson's motion, which was seconded by Mr. Bryant, was deferred until the next meeting.

It was agreed that the next meeting of Fellows and Members should be summoned for Thursday, Dec. 17th, at 3 P.M.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5881 births and 3304 deaths were registered during the week ending Nov. 14th. The annual death-rate in these towns, which had been equal to 18·0 and 19·9 per 1000 in the preceding two weeks, declined again last week to 19·4. During the first six weeks of the current quarter the death-rate in these towns averaged only 18·5 per 1000, and was 2·7 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 12·3 in Nottingham, 13·4 in Leicester, 14·8 in Hull, and 15·1 in Birkenhead. The rates in the other towns ranged upwards to 23·2 in Bolton, 24·6 in Liverpool, 25·0 in Wolverhampton, and 26·5 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been but 273 and 286 in the preceding two weeks, further rose last week to 310; they included 85 from measles, 69 from whooping-cough, 47 from scarlet-fever, 38 from diphtheria, 33 from "fever" (principally enteric), 33 from diarrhœa, and 5 from small-pox. These zymotic diseases caused the lowest death-rates last week in Bristol and Blackburn, and the highest in Liverpool and Brighton. The greatest mortality from measles occurred in Liverpool and Brighton; from whooping-cough in Brighton; from scarlet fever in Leicester; and from "fever" in Leicester, Bolton, and Newcastle-upon-Tyne. The 38 deaths from diphtheria in the twenty-eight towns included 26 in London, 2 in Liverpool, and 2 in Cardiff. Small-pox caused 3 deaths in London and its outer ring (exclusive of 2 in the metropolitan asylum hospital-ship *Atlas*, moored off Dartford), 3 in Liverpool, and 1 in Bristol. The number of small-pox patients in the metropolitan asylum hospitals, which had been 88 and 90 on the preceding two Saturdays, had declined to 79 at the end of last week; the admissions, which had been 11, 14, and 21 in the previous three weeks, declined again last week to 11. The Highgate Small-pox Hospital contained 7 patients on Saturday last, no case having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had increased in the preceding eight weeks from 152 to 394, further rose last week to 418, but were 16 below the corrected weekly average. The causes of 69, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Leicester, Portsmouth, Brighton, and in four other smaller towns. The largest proportions of uncertified deaths were recorded in Sunderland, Salford, Oldham, and Bradford.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 21·2 and 19·7 per 1000 in the preceding two weeks, rose again to 20·5 in the week ending November 14th, and exceeded by 1·1 the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 10·0 in Perth

and 11·4 in Leith, to 24·3 in Glasgow and 29·0 in Paisley. The 500 deaths in the eight towns included 13 which were referred to diarrhœa, 12 to scarlet fever, 10 to whooping-cough, 6 to diphtheria, 2 to measles, 1 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 44 deaths resulted from these principal zymotic diseases, against 55 and 61 in the preceding two weeks. These 44 deaths were equal to an annual rate of 1·8 per 1000, which corresponded with the mean rate from the same diseases in the twenty-eight English towns. The 13 deaths attributed to diarrhœal diseases showed a decline of 4 from the number in the previous week, and were 8 below the number returned in the corresponding week of last year; they included 5 in Glasgow and 3 in Edinburgh. The fatal cases of scarlet fever, which had been 13 and 17 in the preceding two weeks, declined to 12 last week, of which 9 occurred in Glasgow. The 10 deaths from whooping-cough corresponded with the number in the previous week, and included 9 in Glasgow. The 6 deaths referred to diphtheria showed an increase of 4 upon the exceptionally low number, in the previous week; 2 occurred in Glasgow and 2 in Edinburgh. The deaths from "fever," which had been 7 and 10 in the previous two weeks, declined to 1 last week, which occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 83, 117, and 120 in the previous three weeks, further rose last week to 126, and exceeded the number in the corresponding week of last year by 7. The causes of 71, or more than 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 25·6 and 23·5 per 1000 in the preceding two weeks, rose to 29·7 in the week ending Nov. 14th. During the first six weeks of the current quarter the death-rate in the city averaged 24·2 per 1000, while the mean rate during the same period did not exceed 18·1 in London and 16·1 in Edinburgh. The 201 deaths in Dublin last week showed an increase of 42 upon the number in the previous week; they included 9 which were referred to whooping-cough, 8 to "fever" (typhus, enteric, or simple), 7 to scarlet fever, 5 to diarrhœa, and not one either to small-pox, measles, or diphtheria. In all, 29 deaths resulted from these principal zymotic diseases, against 12 and 9 in the preceding two weeks; they were equal to an annual rate of 4·3 per 1000, the rate from the same diseases last week being only 1·2 in Edinburgh and 2·0 in London. The fatal cases of whooping-cough, "fever," scarlet fever, and diarrhœa all considerably exceeded the numbers returned in recent weeks; those of whooping-cough were more numerous than in any previous week of this year. Six deaths from violence and 5 inquest cases were registered; 55, or more than a quarter of the deaths, occurred in public institutions. The deaths of infants showed an increase, while those of elderly persons were fewer than in the previous week. The causes of 31, or more than 15 per cent., of the deaths registered in the city during the week were not certified.

THE SERVICES.

ON the 18th inst. the funeral of Dr. Conroy, Staff Surgeon at Melville Royal Naval Hospital, who died somewhat suddenly after a very brief illness, took place at the Chatham Cemetery with full naval and military honours.

WAR OFFICE.—Surgeon-General William Robert Cornish, C.I.E., Retired List, Madras Medical Department, has been appointed Honorary Physician to the Queen, in succession to Principal Inspector-General of Hospitals G. Pearse, M.D., deceased.

INDIA OFFICE.—The Queen has approved of the following promotion made by the Government in India:—Surgeon-Major Thomas Edward Burton Brown, M.D., of the Bengal Medical Establishment, to be Brigade Surgeon.

ADMIRALTY.—Fleet Surgeon Charles Henry Slaughter has been promoted to the rank of Deputy Inspector-General of Hospitals and Fleets in Her Majesty's Fleet.

The following appointments have been made:—Deputy Inspector-General Francis W. Davis, to Haslar Hospital; Fleet Surgeon Mark A. Harte, to Pembroke Dockyard: Surgeon Charles Anderson, to the *Tyne;* Surgeon William M. Craig, to the *Sultan;* Staff Surgeon St. Lawrence Ffrench-Mullen, M.D., to the Royal Naval Hospital, Chatham; Staff Surgeon C. E. Vasey, to the *Garnet;* and Staff Surgeon Henry J. Madders, additional, to the *Pembroke.*

RIFLE VOLUNTEERS.—15th Middlesex (the Customs and the Docks): Surgeon Frederick William Humphreys is granted the honorary rank of Surgeon-Major.—2nd Volunteer Battalion, the Prince of Wales's (North Staffordshire Regiment), Surgeon and Honorary Surgeon-Major William Browne, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement.

Correspondence.

"Audi alteram partem."

THE ARMSTRONG CASE.

To the Editor of THE LANCET.

SIR,—In the course of your leading article on the Armstrong case, in your issue of the 14th inst., you make certain reflections on my own conduct. Many of these reflections are not, as I submit, supported by the evidence. I have, therefore, to ask that you will do me the justice to find space to make the following observations in answer to some of your remarks.

I may preface these remarks by stating that it is admitted on all hands that, whatever may be the differing views as to my judgment in the matter, no one who has read the evidence can, I venture to hope, for a moment think I was guided by any but good motives. The judge, in his observations, spoke of my knowledge that Eliza Armstrong had been *bought* for immoral purposes. This, if taken alone, and not read in the light of the rest of the evidence, is likely to create a false impression upon those who are unacquainted with the real facts. It appears clearly from the evidence that, although it is true that I was told, and believed, that the mother had *sold* the child for immoral purposes, yet I well knew, and believed, that Mr. Stead had bought her, not with any immoral intention, but, as stated by Mr. Justice Lopes in his letter to the *Pall Mall Gazette*, that she might be "rescued without any harm being done."

Your article states that it is "only under circumstances which necessitate anæsthesia for *remedial* purposes" that it is justifiable to administer chloroform. This is, may I venture to say, not quite an accurate statement of medical practice. Assuming that the examination was called for, then the manner in which it was made—namely, by the administration of chloroform—seems to me not inconsistent with ordinary practice. On this point I refer to the following statement made by the late Sir James Y. Simpson in his Selected Works, p. 663: "Where the required examination is objected to from motives of delicacy, the state of anæsthesia saves the feelings of the patient, a matter of no slight moment in the obstetrical profession." As to the time of the examination, the application to me was not made until late at night, and an early examination was thought desirable, as the intention was that the girl should be taken to a good home early the next morning.

Again, your article states that I placed chloroform in the hands of "an utterly unskilled person." This is by no means the fact. The person in whose hands I placed the chloroform is a trained and skilled nurse, and quite equal to administering it under immediate medical superintendence—and, as appears from the evidence, I was standing by.

Your article states that the purpose in placing the girl under examination was "simply and solely" to whitewash Mr. Stead. This is not the whole truth as to my object. It appears clearly from the evidence that a primary object of my examination was that the girl should be received into a good home, which I was led to believe she would not be without a medical certificate.

The case, as presented to me, was one of a child abandoned by its parents, and about to be taken up by charitable persons who wished to protect her from the dangers to which, as they supposed, she was exposed in her own home, and who wanted my assistance for that object.

I have endeavoured, as briefly as I can, to show that, on

comparing the evidence with your strictures on the points bearing on the part I took in this case, to which I have referred, they are not, as I venture to think, supported by the evidence taken as a whole.—Your obedient servant,

Harley-street, W., Nov. 18th, 1885. HEYWOOD SMITH.

*** We must adhere to our expressed opinions on this case. We have nothing to do with motives, our sole concern is with acts which have discredited the profession. Whatever Dr. Heywood Smith may have understood or thought about the girl Armstrong, he could not have regarded her in the light of a *patient*. That being so, it was wholly opposed to the accepted rule of the profession to place her, or cause her to be placed, under the influence of an anæsthetic. We repeat that, except for a *remedial* purpose, the use of anæsthetics is unjustifiable. Diagnosis may require anæsthesia—as, for example, in the search for a vesical calculus; but diagnosis is a measure for treatment, and forms part of the process by which a remedial purpose is to be carried out. The administration of an anæsthetic by an unqualified person is a breach of rule and practice. Deaths from chloroform not uncommonly occur at the first inhalation. Dr. Heywood Smith does not even assert that he examined the girl for heart disease. Everything, however, turns on the fact that Eliza Armstrong was not a patient, and not being so, Dr. Heywood Smith had no excuse for the exhibition of an anæsthetic.—ED. L.

ON THE PROPOSED M.D. DEGREE OF THE CONJOINT BOARD.

To the Editor of THE LANCET.

SIR,—I have been blamed for keeping aloof from the discussions now going on as to the desirableness, and, as some maintain, even the necessity, considering the interests of the medical schools in London, that the conjoint examining board should have power to confer the M.D. degree with its diploma. Without this power, it is contended that our students would not be fairly dealt by, since, with no better medical and surgical knowledge, students of the Scotch schools (universities) obtain a degree of M.D. as well as the diploma. On these grounds it is said that the London schools are partially forsaken. It will not be denied that every man ought to enjoy the full recognition of his work and of his proved fitness for practice. Besides, it is obviously for the public good that the unequalled field for practical instruction in medicine and surgery which London affords should not be neglected and deserted. Every facility should be given to English students, and every inducement held out to them to carry through their professional studies here in London, where the opportunities are so great.

All other things being equal, circumstances may no doubt occasionally happen when the title of M.D. would be in favour of the man who has it. If this be so, it seems but a fair and direct way out of the difficulty to give the Conjoint Board power to confer an M.D. degree; but, like most easy ways of doing a thing, such a course might prove to be unsatisfactory and beset with serious objections. There is the question of power in the Conjoint Board to give any degree. I do not mean mere legal power, for such might be obtained from a favouring Legislature; but there are considerations which no Legislature, however willing, could satisfy. The Royal College of Physicians in London, and the Royal College of Surgeons of England, before undertaking the degree-giving function, would have to satisfy themselves whether the title M.D. was a fair representative expression of what it implied; and whether it could, by virtue of the knowledge proved to be possessed by the candidate, be conferred upon everyone who successfully passes the examination; for it is to be borne in mind that this is not to be an Honours examination, but an ordinary Pass examination. Further, whether it could be open to objection that the degree was conferred chiefly to neutralise the working of the M.D. of other places. Or could the Colleges, after a survey of the whole relations of the profession, say that this degree is to be given on all grounds, and not on some partial and doubtful grounds? Whether it is a step likely to lead to due order and advancement of medical learning; or whether it is, on the other hand, calculated to extend and stereotype a state of things which the public only in their uninstructedness in medical matters, approve. Would not the degree be fairly open to these and other adverse criticisms on the part of those who best understand the whole matter? Would this degree mean more or less than the whole fact it is intended to mark? Would the man who received it be a Doctor in Medicine and Surgery? If it meant less than this, the College of Surgeons would be ignored in the title; and if it meant this, the title of Doctor of Surgery would leave no place for the membership or fellowship of the College. It is to be granted that at the bedside distinctions of medical degrees should largely disappear, and that, for the ordinary wants of daily life, the public should feel assured that if they require the services of one who has passed the Conjoint Board, they have in him a man whose knowledge has been carefully tested both in medicine and surgery. But a good deal lies beyond this, both in the College of Physicians and the College of Surgeons. These Colleges have Members and Fellows, and the several Universities have their graduates, Bachelors as well as Doctors. Is the M.D. of the Conjoint Board to be both universal and final, or is a man to have two M.D. degrees, one over the other? If so, how is their relation to be expressed? The doubtful relation to the College of Surgeons is already seen. The proposed course would seem obviously to lead to confusion. It may have something to say for itself as a relief against occasional hardship or supposed hardship; but it is not supported by an independent and full consideration of all the circumstances affecting the whole welfare of the profession. It has respect to more limited issues than this. The universality of the title would greatly diminish its value, and, whatever may be said to the contrary, the most distinguished general practitioners in England would look with disfavour upon it.

It seems but a feeble result, as well as a questionable one, that the combined action of the two Colleges, which has been looked for so long, and which is so well calculated to advance the status of the profession, should not have a better fate than that proposed. The diploma to be given by the Conjoint Board should have a distinct and distinctive place and value. This could not be in an M.D. degree awarded for a pass examination open to all. The association of the whole body of general practitioners in England, with the two Colleges in London, will be a sensible gain in status to the whole profession. Already students coming from the colonies for a medical degree in Scotland do not return home without obtaining in addition the membership of the College of Surgeons of London; and when the two Colleges are in co-operation, the conjoint diploma must obtain for the London student all that could be desired. This assurance will be further assured when, as we have good ground to expect, the two Colleges have taken steps for a more complete teaching in London of Physics, Chemistry, Botany, Anatomy, and some departments of Pathology. If the two corporations in London seek to give a degree, the same power will be sought by other corporations in other parts of the kingdom, and this flooding of the profession with the letters M.D. cannot elevate, but rather deteriorate, our position. The Conjoint Board, by the character of its diploma, and by a proper denotation of it, should have a position of its own. The profession, and afterwards the public, will learn what the diploma is worth, and respect it accordingly. It could only injure it to seek to give it a nominal value which only the ignorant would be taken in by.

How this conjoint diploma should be denoted may be a subject for much ingenuity, if only such ingenuity be inspired by the highest sentiment. Many suggestions have already been made, but probably none are better than the terms now in use—namely, Licentiate of the Royal College of Physicians in London, and Member of the Royal College of Surgeons of England. Perhaps the following letters might signify the title to be given—namely, A.M.C. Lond. (Associatus Medicinæ et Chirurgiæ Londinensis). It should certainly prominently appear on the face of the diploma that London was the seat of the teaching and examination. If by this unheroic conclusion, some should say we ignore the wants of those who are about to enter the profession, and of those who are still struggling with its early difficulties, then I know of no answer but such as every man's conscience must supply who is judging this matter. For myself, I am vividly mindful of early wants and struggles, but I do not think the degree as proposed would have lightened them, or can substantially lighten them for others.

I am, Sir, your obedient servant,

Nov. 17th, 1885. WILLIAM W. GULL.

MR. ERICHSEN AND THE M.D. DEGREE.

To the Editor of THE LANCET.

SIR,—I desire, with your permission, to examine some of the statements and arguments advanced by Mr. Erichsen in his bid for the votes of the Edinburgh and St. Andrews Universities. They are, briefly, the stock arguments which everyone must have considered and rejected before giving his adhesion to the proposal that the united Colleges of Physicians and Surgeons should take power to confer degrees—i. e., the lowered value of the M.D. degree, and the injury to the Universities and their graduates, and to the members of the profession generally, which it is assumed would follow.

Let me take first the depreciation in the value of the M.D. degree and the injurious effects on the Universities. For the profession, as is well known, the letters M.D. in themselves have no value; the value depends entirely on the word which follows, indicating the source of the degree, and varies scarcely less than the algebraic $\times$. Reasoning which assumes, as does Mr. Erichsen's, the equality of different degrees contains a gross fallacy, and this assumption operates practically as a fraud. It is desirable that the public as well as the profession, should know that the M.D. represents one thing in one case, another in another, and among the advantages hoped for from the appearance of a new degree an important one is that this difference will be recognised. When such is the case, there is no fear that the Universities, whose degree really represents higher culture or more extensive knowledge, will suffer injury; at present they both suffer and do harm by lending unmerited prestige to degrees which imply neither. But, says Mr. Erichsen, "the general diffusion of the title of M.D., by lowering its value, would also inflict a serious injustice upon those members of the profession who, at considerable expenditure of time and money, have obtained their degrees at the Universities as evidences of higher professional qualifications." The whole force of the demand for the power of conferring a degree by the Colleges lies in the negation of the premises contained in this sentence. It is not the case that the title of M.D. necessarily implies a higher qualification than the diploma of the Colleges, whether tested by the length and completeness of the preparation or by the severity of the examinations, or that it has required a greater expenditure of time and money. Sometimes it does, sometimes it does not; and to speak of all in terms which apply only to a part is a transparent fallacy, and the case stands thus. There are already identical titles which have a widely different meaning. If, then, it is unjust to those medical men whose degrees have been costly in effort, time, and money, that others should possess an identical title obtained at a cheaper rate, this injustice already exists; and there is the further injustice that on the strength of this cheaper title a factitious superiority is assumed by those possessing it over men of equal education and attainment who happen to hold the diplomas of the two Colleges. The M.D. degree is no longer a guarantee of superior training or qualification, and the title is in danger of becoming little better than a false pretence. It cannot well undergo a greater degradation.

But there is another aspect of the question. The more general enjoyment of the title of M.D. by those fitted to hold it may, and will, as we believe, instead of lowering the value of the degree, raise the status of the profession, especially as represented by the great body of general practitioners; and we look at the men, and not at the degree—at the advantage of the profession, and not of any particular University. Mr. Erichsen appears to suppose that the question has been raised by the London teachers, but it has been forced upon their attention and upon the attention of the Colleges by those who have suffered from the injustice complained of.

The Colleges are bound to find a remedy if possible, and, it may be added, to consult their own dignity by rendering unnecessary the hideous inscription, "Physician and Surgeon," which appears on the door-plates of their licentiates. The London University, to which Mr. Erichsen affects to look, cannot so far modify the terms of admission to its degrees as to satisfy the demand, and the Teaching University is a thing of the dim and distant future, unless, indeed, it comes into existence by a slight process of evolution from the combined Colleges.—Your obedient servant,

W. H. BROADBENT.

Seymour-street, Portman-square, Nov. 11th, 1885.

DR. COLLIE AND THE EASTERN HOSPITALS INQUIRY.

To the Editor of THE LANCET.

SIR,—I have been nearly fifteen years the principal medical officer of the Homerton Fever Hospital. My duties have been performed to the best of such ability as I possess. My work has been the subject of continuous observation by the Hospitals Committee and the Metropolitan Asylums Board, and has been supervised by the inspectors of the Local Government Board. But I found myself, eight months ago, suspended from office, and now I hear from the Local Government Board that they decline to remove the suspension. How has this come to pass? I have the word of the Local Government Board for my complete integrity, and for the efficiency with which all my medical duties were performed; but during a time of great pressure the Metropolitan Asylums Board was under the strain of a small-pox epidemic, and the supervision, not of one, but of three hospitals had been put on my too-willing shoulders. While this was the state of matters London came to be under serious apprehension of cholera. The Metropolitan Asylums Board and the Local Government Board in consultation agreed that the best way of meeting the demands for hospital accommodation, in the event of cholera, would be that the business should be undertaken, not by the sanitary authorities of London, but chiefly by the Metropolitan Asylums Board. That Board, accepting this duty, required me, in addition to the three hospitals, to look after possible sites for temporary cholera hospitals over the whole east-end of London. Under these circumstances I did not properly supervise certain diet-sheets or keep certain-case-books. This is construed by the Local Government Board as a reason for acquiescing in my suspension and for now declining to remove it. I, to whom was assigned the function of managing three hospitals at once, and of providing London with forty or fifty more, have shown a want of administrative capacity, evidenced by the discovery of some books not being kept! That much importance did not attach to the keeping of these books in the minds of others who were responsible for the good management of the hospitals is shown by the fact that these books had never been called for by any Local Government Board inspector, or auditor, or by the committee, since the hospital was opened, fifteen years ago. No matter, in this monstrous imbroglio of business heaped on me, books were not kept. Verdict, "Administrative inability"; sentence, "Decline to remove suspension." As regards the most important part of my clerical work, I reported to the committee in February, 1876, that it could not be properly done with the staff at my disposal. But, apart from such justification as this, it is surely not sufficient to warrant removal from my office after fifteen years' service, during which, until March of this year, I had the entire confidence of the managers, and had heaped upon me an amount of work which did not properly belong to me, but which I, anxious to serve the managers and the metropolis to the utmost, did not object to.

I would ask leave to state in more detail what my duties have included during different periods of time, and to cite one or two instances of the kind of work which was required of me. In December, 1876, I was suddenly required to prepare the fever hospital for small-pox. It was ready in twenty-four hours. Upwards of 100 small-pox cases were admitted in a few days, and for about ten days we had over 100 cases of small-pox and 100 cases of fever in the same hospital. The responsibility of this was great, the anxiety was extreme; but the organisation was so good, the supervision so complete, that not a single case of small-pox occurred among the fever cases, nor a single case of "fever" among the small-pox cases. I was required to meet a similar emergency in 1881, and with a similar result; but the strain upon the whole staff was very great. The constant supervision which was necessary to prevent the spread of small-pox to fever and of the latter to small-pox made accurate clerical work impossible. In addition to this, I was at the same time directed to organise the ship *Atlas*, moored at Greenwich; so that at this time I had *three* hospitals under my care, and for a very short period the Darenth camp also! I had also from time to time much work of another kind. To mention but one instance: I was required to investigate and report upon the incidence of small-pox in the neighbourhood of Homerton Hospital, a work which (as only they who have done it can

know) involved great labour, and which for a long period occupied almost the whole of my time. But last year the work was simply overwhelming. During three months, with about thirty beds at my command, I admitted about 1500 cases of small-pox, and during the same period transferred about 1300 to the ships. In one week about 350 were admitted, and in one day 97. All this required the most assiduous supervision, and, I would submit, some administrative ability. I was, in particular, very anxious about the transfer of the acute cases, and was frequently at Potter's Ferry to see the patients embark, so that nothing should go wrong in this novel and, as I thought, risky proceeding; and nothing did go wrong. But this is not all. Immediately the ambulance service was organised it was found necessary to open the Plaistow Hospital. I was then required to supervise this hospital. Under these circumstances certain clerical work could not be properly performed; but London was saved from a great epidemic, and although other persons had a great share in saving the metropolis of London from the most troublesome of diseases, the chief responsibility rested with me.

Under all these circumstances, and having performed such service, I am threatened with the loss of my office! Owing to the pressure of work for seven years I have had no proper holiday. The want of this and the worry of the last eight months have injured my health. For eight months I have received no salary, during which time I have not been able to do any other work. This, surely, is "hard measure," because, being too willing to serve the managers and to save the metropolis from infectious disease, I found it impossible to perform efficiently certain details of clerical work.

I am, Sir, yours faithfully,

ALEX. COLLIE.

South Hill Park Gardens, Hampstead, Nov. 16th, 1885.

UNIVERSITY REFORM IN LONDON.

To the Editor of THE LANCET.

SIR,—It appears from Mr. Magnus's letter to you that, having obtained his majority, he hardly knows what to do with it. He is learning the old lesson that it is easier to mar than to mend, easier to reject a scheme of reform than to amend its defects or to offer something better in its stead. The majority which threw out Lord Justice Fry's scheme are bound to submit an alternative plan of reform or to accept the position of mere obstructives. Having had the advantage of Mr. Magnus's help in a former attempt to move towards the same objects as those which the late committee was instructed to promote, I cannot doubt that he is loyally anxious to help on the same object, and I cordially welcome his belief "that the cause of University reform in London need not eventually suffer by the rejection by Convocation of the alternative amendment." Let us hope that Mr. Magnus will produce a better scheme, for the movement cannot end here.

Dr. Moxon and Dr. Gowers think that the Medical Faculty of London can do without the University of which they are ornaments. Some of the professors of University College think that they can do without the Senate and Convocation and obtain the privileges and endowments of a German University all to themselves. Certain members of Convocation think they can do without either the medical schools, or University and King's Colleges, by refusing all reforms, and waiting until new secessions like that of the Victoria University leave them a mere "rump," separated from all the higher education of London, and consoled by the empty title of an examining board "for the world, or rather for the universe," and by the actual superintendence of the elementary studies of boys in Mauritius.

If our great medical colleges, instead of aiming at the public good by giving our students in London the real advantages of university life, common to Leipsic, to Oxford and to Edinburgh, aim at merely the guinea-stamp of a degree, they will probably fail even of this, and will spoil the University which they might help to form. If University College, instead of taking the eminent position offered it in a real University, spend its strength in attempting to obtain exclusive privileges, it will fail, as it failed in 1835. If Convocation should be so ill-advised as to refuse all reform, and cling obstinately to its present position, it will lose this also, for what statesman would give power to appoint the members of a committee of examination to those who happen to have received its certificate, or to bestow a Parliamentary franchise on members of the Civil Service? I believe better of our profession, of London teachers, and of London graduates.

That Lord Justice Fry's scheme may be improved I do not doubt. Some of us tried to introduce amendments in committee, though our failure did not lead us to pull to pieces what we could not have exactly to our mind. We shall cordially welcome any scheme which attains by better means the objects we have at heart.

One word in reply to Dr. Sansom's interesting letter. The movement for University reform was not, as he supposes, "initiated by two cries." It had begun long before the legitimate attempt began to put London students on a fair footing with those who enjoy the university culture of Newcastle, or Glasgow, or Brussels—long before an Association was founded to promote a Teaching University in London. If Dr. Sansom will refer to the report of the Annual Committee to Convocation in May, 1878, he will find a memorandum on the subject of University reform, with recommendations as to Boards of Studies and University Chairs, and a closer union between teaching and examining; these recommendations were afterwards adopted by Convocation.

The present movement began in the University itself. It has since been helped by outside sympathy, and it greatly depend on the support of the medical teachers of London. If sectional interests prevail, each one can spoil what it cannot replace. If we are all willing to yield something for the common good, there never was so fair a chance of making the University worthy of this great city, and its medical faculty the foremost in Europe.

I am, Sir, yours faithfully,

Harley-street, Nov. 16th, 1885. P. H. PYE-SMITH.

REFORM AT THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—I would beg your forbearance while I draw attention to one or two points in the communication of Mr. Godlee. In the first place, it is much to be regretted that Mr. Godlee had not, on the 29th ult., the courage of his opinions, and did not herald his adverse vote by raising his voice to protest against the two important resolutions proposed at the general meeting of the College of Surgeons. The matter at issue had long been before the medical public, but though at that meeting a direct challenge was thrown down to the party opposed to reform, not a single argument was advanced against those resolutions, not one faithful friend could be found by the Council to take up the cudgels in its defence, and to speak for it while it suffered from its pitiable attack of aphonia. No, Sir, the pleading was all on one side, and judgment went by default. It is a pity that the large number of Fellows not in agreement with the vote could only send half a score of their body to represent them on that occasion. Secondly, Mr. Gamgee is credited with advancing a "false analogy" in his "simile of taxation and representation"; to what the simile is falsely analogous Mr. Godlee does not state, nor even attempt to prove his accusation; he is content with an *ipse dixit*. Thirdly, he is unaware of any other corporation that recognises the principle for which we are striving. He will find the sought-for analogy in the charters of the Pharmaceutical Society, to go no further. In the last place, I wish to offer a personal explanation with regard to the following sentence in Mr. Godlee's letter:—"The result must inevitably be the handing over of the power now exercised by the Fellows to meetings called together by a few active spirits and guided by the inspiration of *anonymous* and *irresponsible* writers." Unless endowed with the gift of prophecy it may be presumed that Mr. Godlee argues from experience of the past. Now, I have searched through all the published "writings" bearing on the subject of enfranchisement of the Members, and with the exception of leading articles in the medical papers and a leader in the *Morning Post*, which writings, being editorial, can scarcely fall under the category quoted, I can only find one piece of anonymous correspondence, and that is a letter signed "A Member" and appearing in THE LANCET, *Medical Times*, and *British Medical Journal* of Oct. 23rd, and with regard to that, Mr. Godlee must be fully aware that no editor of a high-class paper will publish any

comunication unaccompanied by the visiting-card of the author. However, as the reproach has been made, I would wish now to throw off the modest veil of anonymity and reveal the fact that I am answerable for that letter, at the same time thanking Mr. Godlee for the compliment implied in the word "inspiration." I may also state that that letter was not "irresponsible," for before being sent to the editors it was read to and approved by the sub-committee of the Association of the Members of the Royal College of Surgeons appointed to make arrangements for the meeting on the 20th. It was then considered that a more concise note would stand a greater chance of insertion at such short notice, and such a one was accordingly directed to be sent, the sub-committee at the same time advising me to transmit to the papers my original draft, signing it "A Member," as I considered it scarcely decorous to append my own signature to a separate manifesto. I have now learnt that modesty may be mistaken for cowardice; it will be a lesson for my future guidance. I would only now thank you for the impartial hearing you have always given to both sides on this great question of reform.

I am, Sir, your obedient servant,

Western Dispensary, Westminster. WM. ASHTON ELLIS.

THE WEST KENSINGTON MEDICAL AID INSTITUTE.

To the Editor of THE LANCET.

SIR,—In last week's LANCET you published a report, sent by a correspondent, of a meeting of the West London Medico-Chirurgical Society, at which the West London Medical Aid Institute was discussed. I am sure, with your well-known principle *audi alteram partem*, you will permit me to call your attention to an essential point which your correspondent so carefully avoids, that it almost amounts to intentional misrepresentation. I was present at the meeting and heard the President read over the rules. I also heard him state that "a council meeting had been held, and it had been decided that the West London Medical Aid Institute did not come under any rule of the Society." Not content with this important omission of what took place, your correspondent misquotes the rule referring to the subject in a way that is altogether inexcusable. He makes it read thus—"No practitioner is eligible for membership who conducts a dispensary for the purposes of private profit." It should read—"No practitioner is eligible for membership who conducts a *private* dispensary for purposes of personal profit." The transposition of the word "*private*" makes all the difference. The West London Medical Aid Institute is in no sense a private dispensary; it is governed by a committee in which the lay element predominates.

I think, Sir, you will acknowledge that the facts were not fairly laid before your readers by your correspondent, and, in common fairness to those connected with the institute, I trust you will see your way to giving this correction equal prominence with last week's one-sided account.

I am, Sir, your obedient servant,

Talgarth-road, West Kensington, Nov. 17th, 1885. AUGUSTUS W. ADDINSELL, M.B.

*** We have received a letter also from Mr. Philip Birch, alling attention to the alleged misquotation of the rule eferred to.—ED. L.

THE HEART DISEASE OF CHOREA AND RHEUMATISM.

To the Editor of THE LANCET.

SIR,—In a letter which appeared in THE LANCET of Nov. 14th, my friend and colleague, Dr. Sturges, complains that, in my lectures on Heart Disease in Children, recently published in your journal, I quoted from his early lectures on Chorea, without reference to his later and more matured work on the same subject. I think the complaint is a very fair and natural one, and I hasten to express my sincere regret for the oversight. He will, I am sure, believe me when I say that the omission did not arise from any want of appreciation of the great value of his more recent researches, or from any disposition to ignore them, but from simple inadvertence, under the pressure of preparing my lectures for delivery at very short notice.

I do not propose to enter into controversy, or to occupy your space with an examination of the statistics which Dr. Sturges has put forward. They relate to the general question of the connexion between chorea and rheumatism—a question not entered into in my lectures, except so far as the one point of choreic heart-disease involves it. I have taken organic disease of the heart as the starting-point of my inquiry, and in pursuit of it approached the question of the connexion of such heart-disease with chorea from a new direction. The eighty-four cases of chorea which I gave were adduced for the purpose of illustrating the incidence of heart disease in so-called rheumatic and non-rheumatic chorea respectively. These statistics and others which I have given represent correctly the results of my detailed and careful personal investigation. I would ask that they may be judged on their own merits, and not by comparison with others, which, as I have endeavoured to point out in my lectures, rest, in many instances at least, on a narrower basis of clinical evidence and inquiry.

I remain, Sir, your obedient servant,

November, 1885. W. B. CHEADLE.

EDINBURGH.

(From our own Correspondent.)

PATHOLOGISTSHIPS AT THE ROYAL INFIRMARY.

IT was recently decided by the managers of the Edinburgh Royal Infirmary that the post of pathologist, which has been rendered vacant by Dr. Byrom Bramwell's appointment as assistant-physician, shall in future be held by two occupants. Drs. G. Sims Woodhead and Alexander Bruce have been appointed to the joint office, appointments that will appear highly satisfactory to all interested in the welfare of the Edinburgh Medical School. The managers have done wisely in recognising and providing for the necessity for a permanent increase in the staff of the pathological department, from the fact that the work of that department has largely increased of late years, and is likely to do so still further with the increased hospital accommodation now to be provided. In the future it is possible that there may be, from time to time, difficulties in arranging the exact method of conducting the department under a dual control, but these minutiæ are of little importance compared with the outstanding fact that a very large amount of pathological material will be at command; and there is every reason to expect that this material will be very thoroughly elaborated in the hands of the accomplished pathologists who now, or may subsequently, fill the post, and that the gain to the teaching of pathology generally will be a great one.

HOSPITAL SUNDAY IN EDINBURGH.

The general annual collection in aid of the funds of the Royal Infirmary has been announced to take place at all the places of worship in Edinburgh on Sunday, the 22nd inst. In their printed appeal to the contributors, the managers direct special attention to the fact that during the last year a ward containing thirty beds has been opened for the reception of patients, and that in the course of a few weeks accommodation for twenty-four more patients will be provided. They also refer to the increased number of beds which the erection of the observation hospital will place at their command; and they trust that the public will so adequately support them that they will be enabled to meet the increasing demands which are constantly being made upon the resources of the institution. During the past year 7854 in-patients were treated at the infirmary, whilst 25000 have attended the out-patient departments, and have received all necessary dressings and appliances at the cost of the infirmary.

A LARGE ANATOMICAL SUBJECT.

A fine specimen of the bottle-nosed whale, between twenty and thirty feet in length, which was stranded on the east coast near Dunbar, has been acquired by Professor Turner, and is now undergoing dissection in the southern quadrangle at the University Medical Buildings. Its presence has excited a good deal of interest, and several demonstrations have been given of its anatomical configuration. When the dissection is completed, it is intended that the skeleton shall be added to the extensive collection of accurately articulated cetacean skeleta which Professor Turner has accumulated within the walls of the University Anatomical Museum.

Edinburgh, Nov. 16th.

ABERDEEN.

(From our own Correspondent.)

THE ROYAL INFIRMARY.

At a special meeting of the managers held last week, Miss Rachel Frances Lumsden, of the Aberdeen Hospital for Sick Children, was unanimously appointed Lady Superintendent of the Royal Infirmary. This appointment is everywhere hailed with feelings of satisfaction, and a sense of relief now seems to pervade the atmosphere, for the public, judging from the admirable manner in which Miss Lumsden has managed the Children's Hospital during the eight years of its existence, have the utmost confidence in her, and know that no one better able to cope with the difficult task before her could be found. A difficult task, indeed, Miss Lumsden has undertaken; but that she will accomplish it no one has the slightest doubt, and there is equally little doubt, we may safely say, that in her labours she will have the hearty and sympathetic co-operation both of the House Committee and of the members of the staff. Professor Struthers agreed to the appointment "on the distinct understanding that when the regulations came to be framed one of them shall be to the following effect:—'The lady superintendent shall see that the instructions of the physicians and surgeons and their resident assistants, as to the treatment of patients, are carefully carried out.'" This point, Dr. Struthers said, he carried in committee after very hard fighting, and with his reasons for insisting upon it most medical men will sympathise; but judging again from experience in Miss Lumsden's case, such a regulation is quite unnecessary, for the medical officers of the Children's Hospital say that more strict attention to, and faithful carrying out of, their instructions they could not possibly have.

PROSECUTION FOR MILK ADULTERATION.

Two cases of prosecution for adulteration of milk, tried in the Sheriff Court fell through, because the sanitary officials in the steps they had taken in the buying, dividing, and sealing of the milk had not fulfilled the provisions of the Act. Of the quantity bought they returned one-third to the seller, the rest, undivided, they sealed in his presence and retained for analysis; whereas, as the sheriff pointed out, they ought to have divided the milk into three parts, sealed each part separately in the seller's presence, and then returned one part to him and kept the other two parts, one being for the public analyst, the other for the officials at Somerset House.

Aberdeen, Nov. 17th.

PARIS.

(From our own Correspondent.)

THE VITALITY OF MUSCLE.

In a very interesting communication to the Academy of Sciences, Dr. Brown-Séquard demonstrated that even several weeks after death the muscles seem to preserve a certain degree of vitality, and that the cadaveric rigidity appeared to be due, in some measure at least, to the persistence of the essential property inherent in living contractile tissues. The muscles affected with post-mortem rigidity, probably under the exciting influence of chemical changes which are constantly produced in them and prepare them for putrefaction, contract and lengthen themselves alternately several times from the moment when the rigidity begins to when it ceases. These contractions and elongations, which may still be observed during a certain number of weeks after death, are absolutely independent of exterior circumstances.

AN INTERESTING CASE.

The following case, reported by Professor Brouardel to the Society of Medical Jurisprudence, is interesting as being an example of a rare accident (rupture of the heart) in infancy, as well as from a medico-legal point of view. A child nineteen months old died with all the signs of strangulation. At the autopsy a rent was discovered in the anterior wall of the left ventricle of the heart, the other portions of the organ being filled with blood. The medical man who was called upon to report on the case certified that the child died from asphyxia, caused by strangulation, which was also the cause of the rupture of the heart. This, however, was considered a misinterpretation of the nature of the lesion, as Professor Brouardel made out that the child had an ulcerous endocarditis, and an aneurysm in the wall of the heart which prepared it for the rent. He, moreover, added that rupture of a healthy heart can never take place after strangulation, but it is easily understood that it can occur in a diseased heart. The case being a most difficult one to decide as to the share of culpability of the father of the child, who was accused of having strangled it, he was acquitted.

UNFILTERED WATER AND DISEASE.

A striking example of the influence of drinking-water in the production of disease was lately observed at Rouen, where an epidemic of typhoid fever broke out in the 12th Cavalry. This regiment is lodged in new barracks, which was provided with non-filtered water from the Seine; forty of the soldiers were all at the same time under treatment in the hospital, and the medical officers of the regiment had no doubt in their minds that the water was the cause of the epidemic. They advised that the regiment should be immediately removed out to camp, which was put in execution, and the epidemic soon disappeared. By a singular coincidence, another epidemic of typhoid fever broke out among the garrison at Verdun under almost similar circumstances, when similar measures were adopted with equally good results.

DEATH OF M. J. B. BAILLIÈRE.

M. J. B. Baillière, the well-known publisher, medical bookseller, and founder of the firm that bears his name, died on the 8th inst. in the eighty-ninth year of his age. He was the senior of the medical publishers of Paris, and although he became blind during the latter part of his life, he was even to within the last few days of his death to be found at his post, which he occupied for nearly seventy years, and during which time he published some of the most important French medical works extant.

A NEW SOCIETY.

At the instigation of Dr. Ladreit de Lacharrière it is proposed to form a Deontological Society in Paris, the object of which, as its name implies, is to watch over the rights and interests of medical men, and also their duties to each other. The Society may also become useful in all questions touching the legislation of the country, and be a body of reference in all matters concerning litigation and the ethics of the profession.

PRINCE CHARLES OF BAVARIA AND M. PASTEUR.

Prince Charles Theodore of Bavaria, who is known to have entirely devoted himself to medicine, is expected in Paris to initiate himself into the recent discoveries of M. Pasteur for the treatment of hydrophobia.

Paris, Nov. 18th.

Medical News.

University of Oxford.—At a congregation held on the 12th inst., the degree of B.M. was conferred on

Francis Demaunbray Crowdy, Oriel.

University of Cambridge.—At a congregation held on the 12th inst., the following degrees were conferred:—

M.D.—Alexander Hill, Downing.

M.B.—Francis J. Allen, St. John's; G. Hutchinson Milnes, Downing.

Society of Apothecaries.—The following gentleman passed the examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise, on the 12th inst.:—

Earle, Walter George, Rothwell-street.

The following also passed in the Science and Practice of Medicine, and received certificates to practise:—

Gidley, Gustavus George, Honiton, Devonshire.
Queely, John Eugenie St. George, Ingham, North Queensland.
Smith, Samuel Edwin Lambert, General Hospital, Birmingham.

At the first ordinary meeting in the new session of the Statistical Society on the 17th inst., Sir Rawson W. Rawson, K.C.M.G., C.B., president, delivered an opening address on International Statistics, illustrated by vital statistics of Europe and of some of the United States of America.

DONATIONS.—Mr. M. J. Moses and Mr. Geale-Wybants have each given £100 to the City of Dublin Hospital.

COOMBE LYING-IN HOSPITAL, DUBLIN.—Dr. F. W. Kidd, having fulfilled his term of office as assistant-master, has been appointed Supernumerary Assistant to the Master.

MEDICAL MAYOR.—Mr. Richard R. Daglish has been elected the first people's Mayor (under a new charter) of New Romney, Kent.

THE Newbury District Hospital, which has been in course of erection for some time, was opened on the 18th inst., in the presence of a large and influential assembly.

A TELEGRAM from Montreal reports that 2641 deaths from small-pox have occurred there since the scourge began, 2404 of these being French Canadians. Sixteen hundred of the number were children under five years of age.

GUY'S HOSPITAL OXFORD AND CAMBRIDGE GRADUATES' DINNER.—The annual dinner will take place at the Holborn Restaurant at 7 P.M. on Thursday, November 26th, when W. H. A. Jacobson, Esq., will take the chair. Graduates who propose to attend are requested to communicate with Dr. Pitt, Guy's Hospital.

QUEEN'S COLLEGE, BELFAST.—The following scholarships have been awarded at the November Examinations, 1885:—Fourth year: Medical Anatomy and Physiology, S. R. Collier; Medical Therapeutics and Pathology, G. S. Thomson. Third year: R. C. McCullagh, William Weatherup, and Robert Nelson (a prize). Second year: R. W. Haslett and Robert Wilson. First year: Science, W. J. Shannon and W. A. Storey.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—At a meeting of the medical profession of Nottingham, held at the instance of the above Society on Saturday, Nov. 14th, the following resolution was passed: "That the medical practitioners of Nottingham being convinced that vaccination is the only security against small-pox, and that the evils incident to the operation are so slight, compared with the immunity from small-pox which it confers, as to be of no practical importance, are of opinion that the only way in which the disease can be eradicated is by vaccination being universally adopted."

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.—At a meeting of the above Society held on the 4th inst., the following gentlemen were appointed office-bearers for the ensuing year: President: Professor Grainger Stewart. Vice-Presidents: Drs. J. Batty Tuke, John Duncan, and Peel Ritchie. Councillors: Drs. Rattray, A. Moir, Macbride, John Smith, Littlejohn, Troup, and Allen Gray, and Mr. J. Symington. Treasurer: Mr. A. G. Miller. Secretaries: Drs. James and Catheart. Editor of Transactions: Dr. William Craig.

GUY'S HOSPITAL MEDICAL SCHOOL.—The students' refreshment-room at this school has been completely redecorated, and now presents a most pleasing effect. The walls have been papered, and around them a new wooden dado has been placed. This change will render Guy's refreshment-room doubly attractive to the students, with whom it has always been very popular. The authorities have found that in many ways it is a great convenience and advantage to the students to be able to obtain their meals within the building.

QUEEN'S COLLEGE, BELFAST, AND THE ROYAL UNIVERSITY OF IRELAND.—The President of the Belfast College has recently issued a summary of the honours and prizes gained by the students of his College at the recent autumn Examinations of the Royal University. From these tables it appears that the total number who passed the several autumn University Examinations was 793, of whom 235, or 29·7 per cent., were from Queen's College, Belfast, and the total number of exhibitions and prizes awarded was 106, of which the Belfast students gained 44, or 41·5 per cent. Mr. Fitzhenry gained the University Studentship, value £100 for five years, the highest honour in the gift of the University, while the Senate voted a special prize of £50 to Mr. Orr as the next distinguished mathematical student in the University, in addition to a first-class exhibition of £50, with the degree of A.B. The Senate also awarded a prize of £50 to Mr. Harrison, with the degree of LL.B., and a special prize of £20 to Mr. Redfern, with the degree of M.A.O., in addition to a first-class exhibition of £50, with the degree of M.B. During the year the Belfast students obtained from the Royal University 55 degrees in Arts, 6 in Law, 63 in Medicine, and 2 in Engineering, making a total of 126.

RUSSELL MEMORIAL PRIZE.—Some time ago it was decided that a testimonial be presented to the late Dr. Russell, of Birmingham. His death, however, caused the project to be abandoned, and it is now proposed that the money collected shall be placed to the account of a fund for promoting an annual prize in Queen's College, to be called the Russell Memorial Prize. It is suggested that this prize should be offered annually after examination in some definite group of medical diseases, to be announced a year previous to the examination. Additional and increased subscriptions are needed to effect this object.

THE ROYAL SOCIETY.—The following is a list of the names which the President and Council will recommend to the Society at their forthcoming anniversary meeting on the 30th inst. for election into the Council for the ensuing year:—President: Professor G. G. Stokes, M.A., D.C.L., LL.D. Treasurer: J. Evans, D.C.L., LL.D. Secretaries: Professor M. Foster, M.A., M.D., The Lord Raleigh, D.C.L. Foreign Secretary: Professor A. W. Williamson, LL.D. Other members of the Council: Professor R. B. Clifton, M.A., Professor J. Dewar, M.A., Professor W. H. Flower, LL.D., A. Geikie, LL.D., Sir J. D. Hooker, K.C.S.I., Professor T. H. Huxley, LL.D., Admiral Sir A. C. Key, G.C.B., J. N. Lockyer, F.R.A.S., Professor H. N. Moseley, M.A., F.L.S., Professor B. Price, M.A., Professor Pritchard, F.R.A.S., W. J. Russell, Ph.D., Professor J. S. Burdon Sanderson, LL.D., Professor A. Schuster, Ph.D., Lieutenant-General R. Strachey, R.E., C.S.I., General J. T. Walker, C.B.

THE ROYAL HUMANE SOCIETY'S MEDAL.—At a meeting of the Council of this Society on Tuesday last, its medal was awarded to Mr. H. S. Wellcome for his bravery and gallantry in saving life from drowning at the imminent peril and risk of his own. The accident occurred at Boulter's lock on the Thames in September last, and the circumstances are familiar to our readers. Deeds of exceptional daring call for some special mark of recognition, and we congratulate Mr. Wellcome and the Society on the action which has been taken.—On the 13th inst., at Dover, a medal and certificate of the Society were presented to Dr. William Paine, of Clapham, for rescuing a man from drowning. The rescued man at the time of the accident was bathing near the South-Eastern Railway Terminus, the sea being very rough and the spot an exceedingly dangerous one.

SANITARY INSTITUTE OF GREAT BRITAIN.—At an examination held November 12th and 13th, 39 candidates presented themselves, 11 as local surveyors and 28 as inspectors of nuisances. Certificates were granted to two of the former class and to 19 of the latter. The institute has just completed the preparation of a volume containing selections from the reports and writings of the late Dr. W. Farr. The work consists of 550 pages, and is divided into six parts: (1) Population; (2) Marriage; (3) Births; (4) Deaths; (5) Life Tables; (6) Miscellaneous.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALDOUS, GEORGE F., L.R.C.P, M.R.C.S.Lond., has been appointed Resident Medical Officer to the County Lunatic Asylum, Colney Hatch.

BROWN, JOHN, L.R.C.P., L.S.A.Lond., has been reappointed Medical Officer of Health for the Bacup Urban Sanitary District.

BRUCE, ALEXANDER, M.B., F.R.C.P.Ed., has been appointed Pathologist to the Royal Infirmary, Edinburgh, vice Byrom Bramwell, M.D., F.R.C.P.Ed., resigned.

BUSH, JAMES PAUL, M.R.C.S., L.S.A.Lond., has been appointed Surgeon to Out-Patients, Bristol Royal Infirmary, vice Harsant, appointed Surgeon.

CAIRD, FRANCIS MITCHELL, M.B., C.M.Ed., F.R.C.S.Ed., has been appointed Assistant-Surgeon to the Royal Infirmary, Edinburgh.

CHURCHOUSE, WILLIAM JOHN FRANKLIN, L.R.C.P.Ed., L.F.P.S.Glas., L.S.A.Lond., has been appointed Medical Officer of Health for the Urban District of the Daventry Union.

FISHBOURNE, J. W. YORKE, M.B., C.M.Dub., has been appointed Health Officer for the Shire of Keilor, Victoria.

HARE, F. WASHINGTON EVERARD, M.B.Dur., M.R.C.S., has been appointed Assistant-Resident Surgeon to the Brisbane Hospital.

HARPER, ALEXANDER, M.B.Dur., M.R.C.S., has been appointed House-Physician to the West London Hospital, vice Bailey, resigned.

HARRIS, VINCENT D., M.D.Lond., F.R.C.P., Assistant-Physician to the City of London Hospital for Diseases of the Chest, Victoria-park, has been appointed a Physician, vice Dr. J. B. Berkart, resigned.

HARSANT, WILLIAM HENRY, F.R.C.S.Eng., L.S.A.Lond., has been appointed Surgeon to the Bristol Royal Infirmary, vice Cross, resigned.

KEMP, JOHN R., L.R.C.P.Lond., M.R.C.S., has been appointed Assistant-Surgeon to the Central London Ophthalmic Hospital.

LAWRENCE, SIDNEY CAMERON, L.R.C.P.Lond., M.R.C.S., has been appointed Resident Surgeon to the Birmingham General Dispensary.

LEES, WILLIAM, M.R.C.S.Eng., L.S.A.Lond, has been appointed Visiting-Surgeon to the General Infirmary, Chester.

MACDONALD, WILLIAM CRAIG CHRISTIE, M.B., C.M.Glas., has been appointed Resident Surgeon to the Hospital for Pacific Islanders, Ingham, Queensland.

MICKLE, GEORGE, M.B., C.M.Aber., has been appointed Medical Officer for the Kirklington District of the Bedale Union; also Medical Officer for the Pickhill District of the Thirsk Union, vice D. Mickle, deceased.

RICE, RICHARD, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Blewbury District of the Wantage Union, vice Newman, resigned.

WOODHEAD, GERMAN SIMS, M.D., F.R.C.P.Ed., has been appointed Pathologist to the Royal Infirmary, Edinburgh, vice Byrom Bramwell, M.D., F.R.C.P.Ed., resigned.

Births, Marriages, and Deaths.

BIRTHS.

CORFIELD.—On the 14th inst., at Bolton-row, Mayfair, the wife of Professor Corfield, M.A., M.D. (Oxon.), of a son.

DRURY.—On the 11th inst., at Broad-street, Birmingham, the wife of Richard Drury, M.D., of a daughter.

MCDONALD.—On the 9th inst., at The Green, Southall, Middlesex, the wife of George Bruce McDonald, M.D., of a son.

MARRIAGES.

COLES—GIPPS.—On the 4th inst., at East Farleigh, Maidstone, by the Rev. H. F. Gipps (brother of the bride) and the Rev. Canon Elwyn, Vicar of the Parish, Donald Alexander Coles, M.D., younger son of Stratton Coles, of Elgin-crescent, Notting-hill, to Mary Adelaide Bowdler, youngest daughter of the late Walter Gipps, of 32, Marine-parade, Dover.

REES-PHILIPPS — ELKINGTON. — On the 12th inst., at St. Stephen's, Cheltenham, Sutherland Rees-Philipps, M.D., of St. Ann's Heath, Chertsey, to Agnes Emma, younger daughter of Alfred J. Elkington, of Lansdown-place, Cheltenham.

TAIT—GREENWAY. — On the 12th inst., at St. Andrew's Church, Plymouth, William Tait, M.B., R.N., H.M.S. *Cambridge*, youngest son of the late George Tait, Esq., of Kirknewton, Alnwick, to Emma, eldest daughter of John Greenway, Esq., of Shaftesbury Villas, Ford-park, Plymouth.

TANDY—WARD.—On the 4th inst., at St. Margaret's, Westminster, Barré Latter Tandy, L.R.C.P.E., youngest son of the late Edward Tandy, Taxing Master, Court of Chancery, Ireland, to Mary Ellen, only daughter of William Ward, Esq., of Haverhill, Suffolk.

DEATHS.

BLACKWOOD.—On the 12th inst., suddenly, at Wednesbury, Thomas Blackwood, M.D.St. And., L.R.C.P.Ed.

BLAND. — On the 14th inst., at Grays, George Bland, L.R.C.P.Ed., L.R.C.S.Ed., late of Minster, in Sheppey.

CAMERON.—On the 27th Sept., at Adelaide, South Australia, Surgeon-Major John Cameron, M.D., Bengal Army.

CONRY.—On the 15th inst., at Melville Hospital, Chatham, Thomas Conry, Staff-Surgeon R.N., of Clonryn, Co. Longford, aged 45.

OLGUIN.—On the 10th inst., after intense suffering, borne with resignation, at Albany Villas, Brighton, Joseph Olguin, M.R.C.S., of Rosario de Sta. Fé, S. America.

PIGOTT.—On the 11th inst., at Davos Platz, Switzerland, Peter Pigott, M.R.C.S., L.S.A.Lond.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Nov. 19th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Nov. 13	30·05	E.	45	44	...	51	43	...	Overcast
,, 14	29·75	W.	48	47	...	50	44	...	Overcast
,, 15	30·03	N.E.	37	35	...	43	35	·13	Fine
,, 16	30·38	E.	39	37	...	45	33	...	Hazy
,, 17	30·32	E.	37	33	...	44	32	...	Fine
,, 18	29·99	E.	36	33	...	43	31	...	Fine
,, 19	29·94	E.	42	40	...	...	34	...	Overcast

Medical Diary for the ensuing Week.

Monday, November 23.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 2 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. A. Pearce Gould: Cases of Sarcoma rapidly following upon Injury.—Mr. Walter Pye: Pyæmia after removal of a Sarcoma from the Base of the Skull.

Tuesday, November 24.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. C. H. Read: Exhibition of Ethnological Objects from Tierra del Fuego.—Dr. J. B. Billings: Exhibition of Composite Photographs of Skulls.—Mr. J. Theodore Bent: Insular Greek Customs.—Mr. J. W. Crombie: A Game with a History.—Mr. A. W. Howitt: Migrations of the Kurnai Ancestors (Gippsland).

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Arthur Barker: On the Distribution of Bacillus Anthracis in the Human Skin in Malignant Pustule.—Dr. John Harley: A case of Acute Tubercle of the Liver agreeing completely with the so-called Actinomycosis. A series of Microscopic Specimens illustrative of Dr. Harley's paper will be on view at 8 P.M.

Wednesday, November 25.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

HUNTERIAN SOCIETY.—8 P.M. Dr. Herman: (1) Cases in which Turning is facilitated by Amputation of the Prociident Arm; (2) Cases of Disease of the Female Urethra.—Dr. Cotman: Two cases of Sudden Death.—Dr. Turner; Specimens of Traumatic Emphysema.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. Purcell and others.—Dr. R. T. Smith: On Trachelorrhaphy.

Thursday, November 26.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Harveian Lectures by Dr. T. Buzzard on "Some Varieties of Paralysis dependent upon Peripheral Neuritis."

Friday, November 27.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Barwell: A case of Gastrostomy.—Mr. Dent: A case of Gastrostomy.—Mr. John Morgan: A case of Gastrostomy.—Mr. Golding-Bird: Jejunostomy in cases of Cancer of Pylorus. Living Specimens.—Dr. Felix Semon: A case of Congenital Malformations (web between vocal cords, and coloboma of eyelid).—Dr. C. R. Walker: A case of Myxœdema.—Dr. T. D. Savill: A case of Myxœdema.

Saturday, November 28.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations 2 P.M.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

GERMAN UNIVERSITIES.

IN the German and German-speaking universities by far the largest medical faculty is that of Vienna, which has 18 professors, 34 extraordinary professors, and 82 privat-docents, making 134 teachers, the number of students being 2397. Next comes Munich, with 13 professors, 7 extraordinary professors, and 23 privat-docents, making 42 teachers, the number of students being 1129. After this comes Berlin, with 1072 students, and no less than 100 teachers. The smallest of all appears to be Rostock, with 11 teachers and 92 students.

C. M. B. (Glasgow).—In the second century climate was fully appreciated by the Roman physicians as a remedy or prophylactic. Thus in the terrible plague that swept Italy in 188 the Emperor Commodus, at the instance of his medical advisers, quitted Rome, where the mortality was heaviest, for Laurentum on the Latin shore. The dense laurel groves from which the place took its name emitted an odour which seemed to antagonise the pestilence, and suggested to the Roman physicians the inhalation of aromatic essences as a preventive for those who could not leave the city. The passage in Herodian (I., 12) from which these facts are taken is of much interest to the historian of medicine.

THE SIMILARITY OF CYSTINE TO IODOFORM CRYSTALS.

To the Editor of THE LANCET.

SIR,—Those of my *confrères* who are constantly engaged in testing urine for diagnostic purposes in vesico-urethral disease may deem the following hint worthy of remembrance.

I received a sample of urine stated to have been passed by a patient exhibiting most obscure symptoms of vesical disease. The urine was normal; but on examining the deposit microscopically I found numbers of six-sided flat crystals, of various shades of yellow. The case at once was mentally diagnosed as being one of cystinuria. The different shades of yellow seemed, however, very unusual; and I was, moreover, disconcerted at finding that I could get no chemical evidence that the deposit was cystine. After about two hours' work I discovered the crystals to be iodoform, and on writing to the medical man in charge, expressing my opinion that the urine bottle must have been used for iodoform injection, I received an answer that the patient's bladder had been washed-out with iodoform previously to the sample of urine which I had received being passed.

I remain, Sir, yours truly,

George-street, W., Nov. 17th, 1885. E. HURRY FENWICK.

Medicus.—In the circumstances, we think B was justified in retaining the case. There are some cases which in their nature are not transferable, or which for the good of the patient should not be transferred. But B should heartily have sought and cherished the co-operation of A in the future stages of the case, which, according to the account sent us, he does not seem to have done. For the good of the patient, again, it will be kind in A to continue his visits, if this can be done with any dignity.

"THE ANT."

To the Editor of THE LANCET.

SIR,—A tenant of mine in the country complained largely of two large ant-hills just outside his front door, the tenants of which were a great nuisance; but after suggesting to him the use of a mixture of snuff and powdered black hellebore I heard no more complaints, and on inquiry I was informed the mixture caused their entire dispersion. Trusting it will have a similar effect in the case of your correspondent,

Mr. J. F. Milner, I am, Sir, your obedient servant,

Marylebone-road, Nov. 18th, 1885. JOHN WOODLAND.

CONSULTANTS AND GENERAL PRACTITIONERS.

Mr. J. B. Pike.—As a rule, a consultant ought to consult with a general practitioner in every case, and to decline seeing a patient or prescribing for him, except in consultation. We are bound to confess that this dictum is not one which is invariably acted on, even in London, where medical ethics and medical science are supposed to reach their climax. We are not so sure that it is the duty of the general practitioner to complain of a so-called consultation in his absence. The patient is the loser, and in nine cases out of ten returns gratefully to his ordinary adviser. That consultant who is ready to see patients apart from their regular attendant is not one to be approved. We do not say that a consultant can always help himself. A patient may insist on an independent opinion; but the consultant owes it to his patient, as well as to his medical brother, to point out the real nature of a consultation and the importance of having the ordinary adviser's opinion and experience of the case.

Mr. Boughton.—Our correspondent ought to mention his proposed removal to all his friends on the board prior to his application for their consent at their board meeting. If he does not get the board's consent, he would very likely lose his appointment should any rival practitioner start in his district.

Dr. Alex. Thom (Crieff).—The letter has unfortunately been mislaid.

DESQUAMATION EXTRAORDINARY.

To the Editor of THE LANCET.

SIR,—The following case may be of interest to the profession:—

I was riding home a few days since after my daily visit to the district hospital, when I met upon the road a man carrying a woman upon his back, and another woman following close behind with a chair. They stopped, the chair was placed, and the man sat down; they had travelled thus many miles. The woman was unable to walk owing to the tenderness of her skin. Her entire body was of a pink colour, save here and there where huge flakes of desquamating skin still adhered. The finger- and toe-nails were absent.

The following is the history of the case. The woman, a Cypriote peasant from the north of the island, thirty years of age, had been married twelve years, and had had eight children; she had never been otherwise ailing, and there was no history of disease in her family. In the month of March, 1876, she noticed some little red spots about her feet. These spread (numerically) over her legs, and soon the whole body was covered with the eruption. The skin after some days came away in large flakes, first from the extremities and later from the entire body. As each flake dropped the new pink skin appeared beneath. This process of desquamation and renewal continued for eight months. She had no pain, and no constitutional disturbance; she ate well and slept well, and were it not for the inability to walk owing to the tenderness of her feet, she was "as well as ever." Again in March, 1879, she had a renewal of the same peculiar disease, also lasting about eight months and running the same course; and a repetition in March, 1882; and this year in March the red spots again made their appearance, and the woman's condition is as described above. She had never before consulted a medical man, and the only treatment had been to rub her with oil of sesame, called here "Georgiolina." This oil has great repute as a remedy for diseases of the skin. It appears to act as an emollient and allays itching. The woman does not complain of any itching except where flakes of skin are semi-attached.

I send you a sample of the sloughed skin, and trust to your kindness to have it examined and publish the result, not having at my disposal means for accurate microscopic investigation.

I am, Sir, yours truly,

J. T. LAPPAN,

Larnaca, Cyprus, Oct. 30th, 1885. Colonial Surgeon.

*** Several diseases of the skin are known in which large flakes of skin such as those enclosed are thrown off. In pityriasis rubra and pemphigus foliaceus the whole surface of the body is, as a rule, quickly involved, and the former disease is especially characterised by the incessant desquamation of large flakes of skin. These diseases are, as a rule, chronic, but may be relapsing. As a great rarity psoriasis, lichen ruber, and eczema may be quite universal, and simulate pityriasis rubra. There are further some interesting cases on record of recurrent casting of the skin of the whole body. In all these states the nails may be lost and the skin of the hands and feet shed *en masse*. From the description the case is probably one of pityriasis rubra or possibly psoriasis.—ED. L.

HYDRASTIS IN DYSPEPSIA.

To the Editor of THE LANCET.

SIR,—I was pleased to see the value of hydrastis in dyspepsia mentioned by Mr. A. G. Auld in your issue of the 7th inst. It is a drug I use largely, and I can fully confirm your correspondent's statements. I have also found it of great use in the form of suppositories in cancer of the rectum, and as a lotion for indolent and unhealthy ulcers and sores. Moreover, in chronic relaxed sore-throat it forms an excellent gargle.

I am, Sir, yours truly,

Eastbourne, Nov. 9th, 1885. JOHN WALTHER, M.D.

THE SOURCES OF DEGREES AND LICENCES.

Cedric challenges the statement of Mr. Erichsen that corporations alone grant the title of licentiate, &c., and shows that the Universities of Dublin and Durham grant licences. Our correspondent thinks that these bodies exist for students, and not students for them. He instances the case of Lampeter College (St. David's) as that of a college granting theological degrees.

Justitia.—We doubt if the election of the gentleman named would be confirmed by the Local Government Board under the circumstances. At the same time, we do not advise our correspondent to protest against the candidature of his opponent. We shall be glad to be informed of the result of the election.

Borax.—Borax is rarely useful in epilepsy; its mode of action is doubtful.

A CASE OF ACCIDENTAL HÆMORRHAGE.

To the Editor of THE LANCET.

SIR,—Cases of this kind are so infrequent (I have not had one in the 1000 cases I have had during my residence here, nor, in fact, one death of a patient) that you may think the following worth recording.

Mrs. D—— engaged me to attend her for the third time, saying she expected to be confined early in November. I had attended her in her two other confinements, the former of which was a case of impacted breech, the child being removed with great difficulty. Unfortunately, the mother had a severe laceration in the sphincter ani; but this was afterwards completely cured by Dr. Bantock, at the Samaritan Hospital, by his new operation, and has stood sound in her last two confinements. I was called up about 1 A.M. on Sept. 12th, the message being that the patient was bleeding very much. On my arrival I learned that she had, on awaking, found herself "smothered in blood," which proved to be literally true. There was very little pulse. The patient, who was thoroughly blanched, was sick, and in a state of collapse. Finding on examination that it was not a case of placenta prævia, that there was an entire absence of pain, and that the os only admitted the end of the forefinger, I administered a good dose of ergot and brandy, which the patient immediately vomited. Shortly afterwards I injected subcutaneously some ergotine, and ruptured the membranes. This latter procedure, together with cold applications, had the effect of arresting the hæmorrhage; but as the pulse continued still very weak, and as the patient complained of that peculiar pain in the heart experienced in cases where large quantities of blood have been lost, I injected ten drops of ether with fifteen drops of ergotine. This seemed, amongst other things, to stop the vomiting; the pulse gained power, and the patient expressed herself as feeling better. Labour set in at 4 A.M., and at 5.30 A.M. the patient was delivered of a stillborn male child. During the pains the only blood lost, judging from its dark colour, was that which had been retained in the womb from the first loss. Fortunately, the nurse understood the gravity of the case, and faithfully carried out my instructions as to perfect rest, quietude, and good nourishment. The patient is now rapidly approaching convalescence. I am, Sir, yours truly,

Queen's-park, W., Oct. 22nd, 1885. A. K. GRIFFITH, M.D.

Mr. J. K. White, M.B.—It is best used as a powder; but it may be dissolved in alcohol.

A CURIOUS CASE.

To the Editor of THE LANCET.

SIR,—The following case, being one of an unusual character, may be of interest to some of your readers.

A woman brought her female infant, aged eighteen months, to my surgery on the evening of the 3rd inst. She said there was something forming in the front passage of the child. I examined the vagina; the labia were much swollen, and protruding from the orifice of the urethra was a hard substance. The child screamed so much upon the least touch, and seemed in such pain, that I did nothing further than give the mother a syringe and a lotion, telling her to use it frequently and to see me again. The child was brought to me the next day, with the report that the substance had been passed, the mother bringing it with her. It was a calculus about the size of a large pea. I have not examined it chemically, but it looks of a phosphatic nature. Perhaps some of your readers can throw some light upon this somewhat remarkable case.

I am, Sir, yours faithfully,

Woburn, Bucks, Nov. 5th, 1885. FREDK. ALLWRIGHT, L.R.C.S.I., &c.

A FEBRILE EPIDEMIC.

To the Editor of THE LANCET.

SIR,—In your issue of Oct. 31st last I notice that Dr. Seaton, at a meeting of the Clinical Society of London, read a paper on the Characteristic Symptoms of a Febrile Epidemic Illness at a School. It may be interesting to Dr. Seaton and to your readers generally to know that a similar epidemic raged in Ansty, a village three miles from Leicester, for nearly three months. I have to add that I sent a very brief description of it to the *Edinburgh Medical Journal*. In my cases, which were over 100, only one patient had pneumonia; about twelve had bronchial catarrh. The fever attacked children principally, about 95 per cent. It raged from June to August. The sanitary condition of Ansty was, from a paucity of watercloseta, alarming. The fever was contagious, though the contagion was not from person to person. As to the incubation period, it was practically impossible to calculate it, as all cases were taken quite suddenly. I am, Sir, yours truly,

Loughborough, Nov. 13th, 1885. W. B. GARVIN, L.R.C.P. & S. Ed.

THE PROFESSION IN RUSSIA.

IN Russia there are 74 members of the Medical Council and 43 members of the Veterinary Commission. The total number of members of the provincial and county medical councils is 281. The roll of the profession contains 33,400 names, and there are about 330 female practitioners. About 2100 persons have the right to practise veterinary surgery. There are some 500 dentists and "oculists." The number of pharmacists of various descriptions is about 2000.

Mr. Bathe.—It is to be regretted that payment of the small fee is still the rule with the older offices. Some of the younger offices pay a fee of £2 2s. in cases where the sum assured exceeds £500.

Mr. J. W. Buckle.—The project was noticed in our last issue, page 909.

"MEDICAL CHARGE OF TRANSPORT SHIPS."

To the Editor of THE LANCET.

SIR,—In reply to your correspondent "H.," who wrote under the above heading in your last issue, I beg to say that there can be no doubt that he is legally entitled to the sum of money in question, in his capacity as surgeon of a hired transport, in the same manner as a surgeon of a mail steamer. The mistake he appears to have made was to have allowed the fees to fall into the hands of the steamship owners. In all such cases, when acting as surgeon in the mail service, I was careful to have my statement of account countersigned by the commander of the vessel to which I was attached, and then forwarded direct to the Pay Department of the Admiralty or War Office, as the case might be, the order for payment being sent direct to me at my private address. I would advise your correspondent to insist upon the amount being handed over to him without any deductions whatever.

I am, Sir, your obedient servant,

EDWARD A. PIGGOTT, L.R.C.P. Ed.,
Late Surgeon P. & O. and Royal West Indian
Clare, Suffolk, Nov. 14th, 1885. Mail Services.

To the Editor of THE LANCET.

SIR,—As an old ship-surgeon, I can inform "H." that he is entitled to the sum paid by the Admiralty for the invalids travelling on the ship he was surgeon of, provided that his name is on the British Medical Register. I always was paid for services rendered to invalids when a surgeon in the Royal Mail Company, and so are surgeons in other large shipping companies. I would advise your correspondent to refuse to sign the receipt for the £4 7s. required. It is, if I remember rightly, stated on the Admiralty form demanding payment for such services that the money is to be paid *to the surgeon*. I have no doubt, by way of further proof that your correspondent could get letters from large shipping companies, like the P. & O. and the Royal Mail, proving that surgeons in their employ always receive such payments from the Admiralty. I am, Sir, yours truly,

Nov. 14th, 1885. EX-SHIP-SURGEON.

To the Editor of THE LANCET.

SIR,—Your correspondent "H." seems to have been treated unfairly by the steamship company. The following is an extract from the instructions issued to surgeons of the Ocean Steamship Company (Liverpool to China):—"Besides this [i.e., the regular pay], you will receive one-half of all fees paid by Government for your attendance upon Government invalid passengers (the other half being kept by me to cover the cost of medicines, diet, &c.)." I am, Sir, yours truly,

Nov. 15th, 1885. G.

*** Other letters have been received corroborating in effect the statements made in the above communications.—ED. L.

A Young Practitioner.—Such instances of deception on the part of hysterical women are by no means uncommon. Without any knowledge of the internal structure of earthworms and lumbrici, it is easy to distinguish them. In the roundworm (ascaris) the body is nearly uniform in thickness, and has two very conspicuous lateral lines passing from one end to the other, and there is a distinct head, due to the presence of three large lips. These characters are wanting in garden lob-worms, in which the tail is also long and tapering. The skin of earthworms readily decomposes, but the hard, chitinous integument of true ascarides remains intact long after the death of the entozoon.

"SANITARY STOVE."

To the Editor of THE LANCET.

SIR,—In the current issue of your journal you publish a letter from a Mr. Stephens, referring to a stove which is stated to fulfil the requirements specified in a previous number of THE LANCET. In justice to myself, I now ask you to allow me to state that the want has long been supplied by my patent terra-cotta stove for coal or coke. This stove is recommended by every medical man to whom its merits are known, as emitting perfectly pure heat, and being therefore especially suitable for use in invalids' rooms. I shall be glad to furnish full particulars to any inquirer, and will send printed testimonials on application free. I would not have troubled you with this had you not published Mr. Stephens's letter; but I feel that I can rely on your impartiality to accord me the same publicity which you have granted to him.

I am, Sir, yours faithfully,

Victoria-street, S.W., Nov. 14th, 1885. THOMAS ROBERTS.

MEDICAL MEN AND POLITICS.

To the Editor of THE LANCET.

SIR,—Will you allow me to offer a few remarks on this subject?

I take the crucial question to be, whether it is to the advantage of the nation that medical men abstain from taking an active part in politics. It is a truism that legislative power is determined by political influence. I ask how is it possible for medical men to get the ear of Parliament with effect unless they make it plain that they can influence votes? I admit that politics, as a rule, should be kept out of the pulpit, and always kept out of prescriptions; but, to my mind, it would be a national calamity, and would tend to political degradation, as obtains in America, if the clerical and medical professions, numbering some 50,000 highly educated gentlemen, holding very generally moderate views, left the Government to professional politicians. Government is by "gab"; therefore medical men, in order to obtain power, must take an active part on platforms, and if individual or professional interests suffer thereby, they must be sacrificed for the national good. But sick folk will seek medical assistance irrespective of the question whether the profession is a cypher or counts for something in the councils of the empire; there could be no material loss to the faculty as a whole, and it is not probable that practices would even change in size. It is but a huckstering spirit that measures success in life by a phial or the number of names in the ledger, and is afraid to call one's political soul one's own for fear of offending Mrs. Muggins's husband. An outspoken and declared politician is respected even by opponents, but a trimmer is despised. At all costs pill-making must be subordinated to law-making. A doctor if you please, but a responsible citizen of this great empire none the less—a responsibility which no profession can excuse him from exercising to the very height of his ability.

I am, Sir, yours truly,

Plymouth, Nov. 14th, 1885. A. H. BAMPTON, M.D.

Mr. Jas. Weaver.—The case of the person named has been under the consideration of the Council of the College of Surgeons.

Lector.—Perhaps the best work to consult would be the recently published "System of Medicine," edited by Dr. Wm. Pepper.

R. C.—C. P. Wilson, Esq., St. Katharine's Dock House, Tower Hill.

"PARTURITION IN INSECT LIFE."

To the Editor of THE LANCET.

SIR,—*A propos* of the interesting annotation respecting ants which appeared under the above heading in your issue of the 7th inst., I have observed parturition as it takes place in aphides—creatures of which it is said that they are kept by ants, like cows, for the sake of a secretion which they yield, and which the ants take from them and use as food. I have watched the brown aphis, called the "cherry-tree plant-louse," bring forth its young, and have seen distinct "labour pains" going on intermittingly for some time before the final effort which expels the baby aphis into the world. I have also seen these insects shed their skins, and, judging from the wriggling and straining which goes on for ten or fifteen minutes, I should think the process, if such insects have sensations analogous to human beings, must be the reverse of a pleasurable one.

I am, Sir, yours truly,

Taunton, Nov. 12th, 1885. W. M. KELLY, M.D.

ERRATUM.—In the prescription recommended by Dr. F. F. Andrews last week for sleeplessness in an infant, "castor oil" was by a typographical error put for *cod-liver oil*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. De H. Hall, London; Dr. Cobbold, London; Dr. Collier, Oxford; Sir W. Gull, London; Mr. Wherry, Cambridge; Mr. Woodland; Mr. George Brown, London; Mr. White, Nottingham; Messrs. Metzler and Co., London; Brigade-Surgeon Gribbon; Mr. Greenish, London; Mr. J. G. Shea, Chesterfield; Mr. Sachs, London; Dr. Dobie, Chester; Mr. H. Harrison, Bangor; Mr. J. W. Allan, Glasgow; Dr. Illingworth, Clayton-le-Moors; Dr. Walford, Ramsgate; Mr. G. E. Walker, Liverpool; Dr. Douglas Powell, London; Messrs. Lœflund and Co., London; Dr. J. D. Pryce, Nottingham; Dr. Kelly, Taunton; Mr. Meadows, Hastings; Mr. O. H. Garland, Leith; Mr. Buckle; Mr. Allison, London; Mr. F. W. E. Green, London; Dr. Brodie, Detroit; Mr. C. A. Thimm, London; Dr. Delvaille, Paris; Mr. Lawson Tait, Birmingham; Dr. Galezowski, Paris; Mr. Stringfellow, Bagnor; Dr. James, Edinburgh; Dr. George Harley, London; Mr. J. G. Stuart, Edinburgh; Mr. E. A. Piggott, Clare; Mr. Garvin, Silsby; Mr. J. B. Pike, Loughboro'; Mr. J. Craig, Llandudno; Mr. G. F. Wills; Mr. E. T. Yeates, Newhaven; Dr. Forshall, Highgate; Mr. Gubb; Mr. Curne, Child Okefield; Mr. H. H. Hewitt; Mr. Biggs, London; Mr. P. Birch, London; Mr. Croskery, Bekingdon; Mr. A. W. Addinsell, London; Mr. Bowie, London; Dr. Hale White, London; Mr. W. Fraser, Aberdeen; Dr. Stetch Dowse, London; Mr. J. Milward, Cardiff; Mr. P. H. Rochfort; Mr. Boughton; Surg.-Major Hendley, Jeypore; Dr. Furnell, Madras; Dr. Cheadle, London; Mr. Assafrey, Glasgow; Mr. E. H. Fenwick, London; Messrs. Lattimer and Co., Exeter; Mr. T. V. Lister, London; Mr. Harrison, Liverpool; Mr. Fuge, Taunton; Mr. Mitchell, Smethwick; Messrs. Waite and Battman, London; Mr. Ransford, Davos; Mrs. Moore, Lago, Italy; Dr. Eberle, Thirsk; Messrs. Mottershead and Co., Manchester; Messrs. Boulton and Paul, Norwich; Mr. Edmunds, London; Messrs. Griffin and Co., London; Miss Brown, Clapton; Mr. Muddock, Geneva; Mr. Abbs, Dewsbury; Mr. Bramwell, Cheltenham; Mr. Cooper; Mr. Daws, Plymouth; Mr. Rimington, Notts; Mr. Woods; Mr. Heath, Liverpool; Dr. Bernhardt, Lincoln; Mr. Birchall, Liverpool; Mr. Cockson, Wisbeach; Mr. Nathaniel; Mr. Backshaw, Southport; Mr. Zachos, New York; Mr. Kimpton, London; Mr. Reeves, London; Mrs. Evans, Stockport; Messrs. Slinger and Son, York; Mr. Hellard; Mr. Berthier, Paris; Mrs. Rahn, Ipswich; Mr. Monckton, Maidstone; Mr. Freeman; The Under-Secretary of State for India; Medicus; A late Mercantile Marine Surgeon; G.; Ex-Ship-Surgeon; A Young Practitioner.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Calder, Perth; Mr. Paterson, Glasgow; Dr. Leeson, Brighton; Mr. Brown, Tredegar; Dr. Maunsell, Welford; Mr. Head, Dublin; Mr. Thwaites, Bristol; Messrs. Wilson and Son, Manchester; Messrs. Smith and Son, Dublin; Mr. Blenkarne, Buckingham; Mr. Stock; Mr. Davis, Honiton; Mr. Browne, Douglas; Mr. Stone; Messrs. Gale and Co., London; Mr. Edlundh; Mr. Jago; Mr. Wood, Fulham; Mr. Reilly, London; Mr. Coltman, Leicester; Dr. Branthwaite, Twickenham; Dr. Waugh, Toddington; Mr. Ramsdale, Patricroft; Mr. Flaxman, Pittywein; Mr. Guest, Hulme; Dr. Mackey, Brighton; Mr. Hill, Beeralston; Mr. Smith, Halifax; Messrs. Porteous and Co., Glasgow; Mr. Henry, New Zealand; Mr. Turner, Manchester; Mr. Wood, High Barnet; Mr. Heywood, Manchester; Messrs. Holman and Son, Holme; Mr. Johnston, Sheffield; Medicus, Derby; A. R., Southport; M.B., Liverpool; Medicus, Liverpool; Undergraduate; Medicus, West Leigh; G. M.; Medicus, Cerne Abbas; W. S., Bristol; M. C. J., Taunton; Via; F. B., Birkenhead; M.A.; G. J., London; A. W. T., Hereford; M.B., Plymouth; J. M., Truro; Fides, Brighton; Surgeon, Manchester; Medicus, Spalding; J. W. B., Tolles D'Arcy; N., Edinburgh; Medicus; L.R.C.P., Notting-hill; Thermometer; Medicus, Radcliffe; J. H., Llanelly; Medicus, Putney; W. A.; Medicus, Maidstone; W. C. O., Bath.

Illustrated London News (Christmas Number), *Illustrated Sporting and Dramatic News* (Christmas Number), *Christian Million* (Christmas Number), *Chicago Daily News*, *Miscellanea Genealogica et Heraldica*, *Shoreditch Citizen*, *L'Indicateur de Cannes*, *North British Agriculturist*, *Windsor and Eton Express*, *Strathearn Herald*, *South Wales Daily News*, *Invergordon Times*, &c., have been received.

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